MSS from IndustriOS

MRP/MPS User Manual

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sage software

Integration Partner

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Getting Started

Getting Started Overview

You should have a basic knowledge of the Windows environment and procedures, including using Windows Explorer. You should also have a complete understanding of your system setup, including all hardware, network, and software configurations. The following is a list of items you should know, complete, and understand before installing our programs.

- ✓ This software is subject to the terms and conditions detailed in the license agreement, which is included as part of the software installation.
- ✓ Pre-sale support for the evaluation software and technical support for users with a support contract is available through 866-275-9028.
- ✓ This software is installed as an evaluation version, which will expire 1 month after installation. To continue using the programs beyond that time you need to receive an unlock code (registered users), or purchase it from your Sage PFW reseller.
- ✓ You must install the version of our software that is compatible with your Sage PFW. Please contact technical support, if you are unsure if you have the correct version of our software. Before you begin the installation and use of this program, you should have in-depth knowledge of your Sage PFW Software.
- ✓ Pervasive Software Corporation's database engine must be setup and configured properly before our programs will function.
- ✓ If you are upgrading from a previous version of the MSS software, please follow the upgrade procedure outlined in the System Basics Users Manual. It is very important that all users are accessing the same software version and old software does not exist on workstation or network drives.
- ✓ This program will not operate independently from our Bill of Material Processor Module. All bills of materials must be setup within BOMP, before using MRP.

System Requirements

To use MSS from IndustriOS. programs you will need the following:

- ✓ Hardware Requirements are the same as those for Sage PFW 5.5..
- ✓ Sage PFW 5.5 down to 5.1.
- ✓ MRP requires the following Sage PFW modules: Inventory and General Ledger

- ✓ To run the Order Entry Preload program – to load live sales orders into the forecast, you also need a sales order module. BOMP is tightly integrated with the IndustriOS Sales Order Fulfillment, Sage PFW SO, and Sage PFW Process Manaufacturing Sales Order modules. Regardless of the sales order module chosen, the user interface for this program is the same. The program will assume the Sage PFW SO module unless told otherwise. To indicate Process Manufacturing, turn on the "Interface to BatchMaster" flag in the BOMP Default program. To indicate that you are using the IndustriOS Sales Order Fulfillment module, you enter a path in Company Setup (see the System Manger manual) for the "Path to IndustriOS data files".
- ✓ To automatically update purchase orders based on the MRP report, you need a purchasing module. Either the Sage PFW PO module or the Sage PFW Process Manufacturing PO module may be used.
- ✓ Bill of Materials Processor Module from MSS by IndustriOS.

Basic Functionality

The MRP/MPS module was designed to give Sage PFW users the ability to develop manufacturing forecasting plans and determine material requirements based on the production plan. The forecasting plan allows user to take into account such considerations as sales forecasts, customer orders, minimum stock requirements, maximum order, and reorder quantities.

MRP Process Flow

Step 1 ~ Install Software

Follow the installation instructions outlined in the Getting Started Guide. The Getting Started Guide can be downloaded from our web site.

Step 2 ~ Create and Select a Company.

The user may setup multiple companies and easily switch between each processing company. For more information, please refer to the Getting Started Guide.

Step 3 ~ BOMP

The Bill of Materials Processor needs to be setup and you need to create your bills of materials. For more information, please refer to the BOMP Manual.

Step 4 ~ Defaults

Set up the MRP/MPS Defaults. For more information, please see on page 11.

Step 5 ~ Order Entry Preload (Optional Step)

Run the Order Entry Preload Utility. The Order Entry Preload utility allows users to populate the Production Schedule using orders that have been entered into Sage PFW. This utility is useful to companies that manufacture items on a make-to-order basis. The program reads the sales order module for orders with the specified order status and fills the assembly's planned quantity with the quantity remaining on the order. For more information, please see on page 23.

Step 6 ~ Production Schedule Entry

Enter and/or modify the Production Schedule in the Production Schedule Maintenance Screen. If your Production Schedule is not order driven, then this screen should be used to enter the schedule and forecasting. This program only allows planning of inventory items with an associated BOM in the Bill of Materials Processor program. For more information, please see

To Plan for Independent Demand on Component Items: create a planning BOM that includes all items that require independent demand planning. The quantity should be set as a ratio to the planned quantity entered in Production Schedule Maintenance. The BOM can be modified before running the Production Schedule and Materials Requirement Report. The independent demand will then be included in your calculated report planned quantities.

Step 7 ~ Planned Forecast Listing

Run the Planned Forecast Listing Report. This report will list the Production Schedule plans that have been entered and/or pre-loaded between a specified range of dates, items, and locations. The listing will also show who entered the plan and when it was entered. For more information, please see on page 33.

Step 8 ~ Production Schedule Report

Run the Production Schedule Report. The Production Schedule Report is generated for all finished good items that need to be manufactured in order to fulfill the production plans formulated in the Production Schedule Entry program. For more information, please see on page 53.

BOMP Interface: An option is included to auto-generate transactions within the Bill of Materials Processor for the Assembly Items that need to be manufactured.

Step 9 ~ Materials Requirement Report

Run the Materials Requirement Report. The Material Requirements Report computes the component quantities that are required to produce the finished good items generated by the Production Schedule Report. For more information, please see on page 40.

Sage PFW Interface: This report includes the option to create Purchase Orders for all generated raw material items. The purchase orders may be viewed, modified, and posted through the Sage PFW's Purchase Order Module.

You will need to assign an Item Type (In Sage PFW) of "F" for your sub-assemblies or the MPS and MRP reports will not print correct results.

Please read the BOMP Interface Section of the BOMP Manual and chapters of the MRP/MPS Manual to get a further understating of how MRP/MPS integrates with BOMP and Sage PFW.

Proper Procedure for Sample Forecast Types

- If you have a long tern forecast and a short term forecast where the only difference is that the long term looks at a longer period of time, and is identical to the short term over the short term range of dates, then you may enter the long term forecast into the production schedule grid

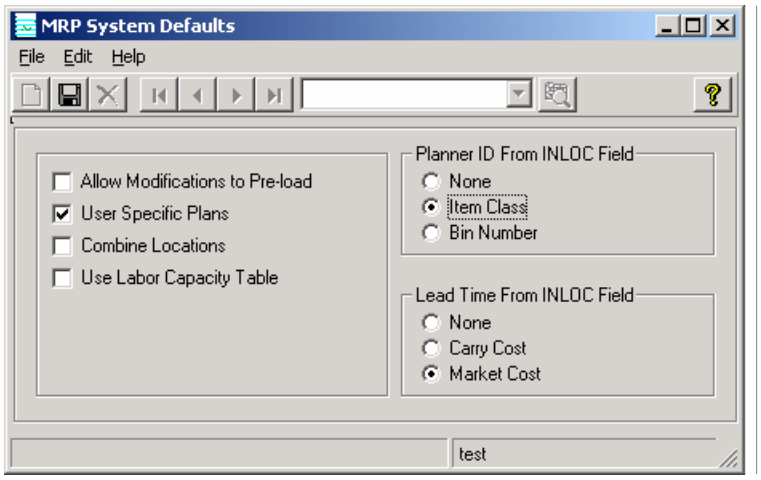
and use the date parameters (start date, number of periods, and days per period) to limit the data being reported to the short term view or change the parameters to see the extended view.

- If you have multiple lines which are totally independent, in that they do not share any components, then you may enter the complete forecast and limit the reporting to the desired line by: range of assembly keys in the Production Schedule Report and/or the MRP Report; and may also limit the components to be printed in the MRP Report.
- If you have several different forecast plans (such as best guess, optimistic, and pessimistic) then you would just fill in the plan name by each item in the Production Schedule Maintenance Grid and run the report for the desired plan.

MRP Defaults

Default Setup Overview

The Default screen allows the user to set optional parameters that are used when running various MRP/MPS programs. This information is very important and the program will not function properly if the information is entered incorrectly.



Field Definitions

Allow Modifications to Preload

This option allows the user to modify the planned quantities of the preloaded orders. After running the Order Entry Preload, the user can modify the Assembly quantities in the Production Schedule Maintenance screen.

User Specific Plans

When logging in to the MSS from IndustriOS Main Menu screen a 1-8-character user name is required. MRP/MPS uses the user name to track entries made in the Production Schedule Maintenance Screen. If this option is selected the program screens will only display and report on data that is related to entries made by the user that is currently logged into the program. If this option is not selected then the program screens will display and report on all items entered into the Production Schedule Maintenance Screen regardless of the user that entered the data.

Combine Locations

This check box will combine assembly items with multiple locations into the location selected in the “Location Key for Combined Locations” field. This option should be left blank to plan item quantities in individual locations.

When this check box is checked a new field “Location Key for Combined locations” will appear. See more info on this field below.

Use Labor Capacity Table

Labor capacity is part of our capacity planning tool set. The MRP module uses an infinite capacity model, and so it does not realistically schedule jobs. It does, however, give you tools to assist you in planning your jobs.

The purpose of the Labor Capacity file is to allow for different capacities on a day by day basis. If the Use Labor Capacity Table box is not checked, then the MRP program will use the same daily capacity for all days.

Including labor items (whether additional cost or inventory items) in the MRP gives you capacity planning information. For example, if you specify that the capacity of a labor department is 60 hours and the planned workload calls for 100 hours, this would be very obvious. You may then reschedule jobs or people to better handle the load.

If the "Use Labor Capacity Table" checkbox is checked then the daily capacity will be taken from the Labor Capacity Table. If it is not checked then the daily capacity for additional cost items will be taken from additional cost file maintenance in BOMP, and for inventory items it will be taken from the minimum quantity in the Item Location file.

For Additional Cost Items:

If the "Use Labor Capacity Table" checkbox (in the MRP Report / Report Options section) is checked then it will put the amount in the table for that item into the appropriate On Order bucket for that item. All inventory item keys will be processed this way if it is checked.

If the "Use Labor Capacity Table" checkbox is NOT checked then it will multiply the daily capacity times the "Days per Period" and put that amount in each On Order bucket for that item.

Location Key for Combined Locations

(Note, this field will only appear if the combine locations option is selected.)

The reports and entry screens will display this location, but the inventory quantities will be a combination of all Sage PFW locations. MRP/MPS will use the combined quantities when calculating net requirements in the MPS and MRP reports. All of your Sage PFW Inventory Items must have a valid INLOC record for this location. If an Assembly or Component Item does not exist in this location, you will receive an error “status 4” when planning or running reports.

Planner ID from INLOC Field

Sage PFW does not include a field to enter a Planner ID code, as did previous versions. MRP/MPS has been modified to read one of the following fields to use as a Planner ID code.

None

If this option is selected then MRP/MPS will not display a Planner ID Code.

Item Class

If this option is selected then the item's Item Class Code (from Sage PFW) will be displayed as the Planner ID.

Bin Number

If this option is selected then the item's Bin Number, as assigned in Sage PFW, will be displayed as the Planner ID.

Lead Time from INLOC Field

Sage PFW does not include a field to enter a Lead-Time. MRP/MPS has been modified to use one of the following Sage PFW Inventory Item Location Fields to control lead-time.

None

This option will not display the lead-time on any reports.

Carry Cost

The Carry Cost field from Sage PFW's Inventory Location file is used to display the lead-time of an item. The Carry Cost field will need to be populated with the correct lead-time for the inventory items.

Market Cost

The Market Cost field from Sage PFW's Inventory Location file is used to display the lead-time of an item. The Market Cost field will need to be populated with the correct lead-time for the item.

File Menu

Save (Ctrl + S)

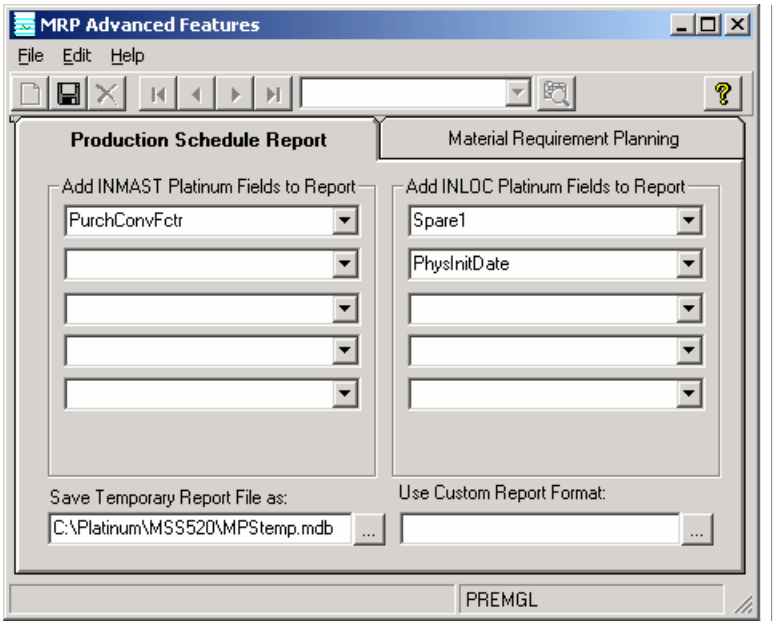
This option stores new or modified information to the BOMP.MDB file. The save button from the tool bar may also used to store new or modified information.

Exit

This button shuts down the current screen and the program returns to the Main Menu.

MRP Advanced Features

Production Schedule Report



Add INMAST Sage PFW Fields to Report

This option allows the user to add up to five additional fields from INMAST to the report. To make your selection just click on the arrow to the right of the field and the click on the desired INMAST field from the dropdown list.

You can only print a total of 5 additional fields combined from INLOC or INMAST. For example: If you had 3 additional fields set up in INLOC you could only have 2 others coming from INMAST.

Once you have added the desired fields in the MRP Advanced Features program, from Windows Explorer double click on the report you will be using (to see which report you use see the Which Report to Edit section of this report.) and click on insert – database fields. Here you will see a file called Extra Info. In that file are 5 fields – Add Item 1 to 5. When you specify which fields are to be added in the MRP Advanced Features, the program inserts the associated values into those fields. You then use the Crystal Design tool to insert these five fields into the rpt file, where you want them.

Add INLOC Sage PFW Fields to Report

This option allows the user to add up to five additional fields from INLOC to the report. To make your selection just click on the arrow to the right of the field and the click on the desired INLOC field from the dropdown list.

You can only print a total of 5 additional fields combined from INLOC or INMAST. For example: If you had 3 additional fields set up in INLOC you could only have 2 others coming from INMAST.

Once you have added the desired fields in the MRP Advanced Features program, from Windows Explorer double click on the report you will be using (to see which report you use see the Which Report to Edit section of this report.) and click on insert – database fields. Here you will see a file called Extra Info. In that file are 5 fields – Add Item 1 to 5. When you specify which fields are to be added in the MRP Advanced Features, the program inserts the associated values into those fields. You then use the Crystal Design tool to insert these five fields into the rpt file, where you want them.

Save Temporary Report File as

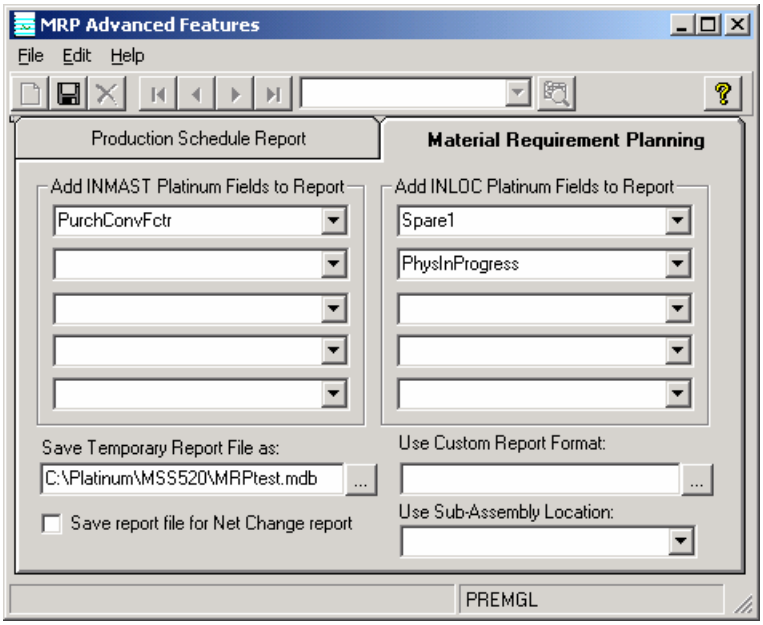
This allows the user to select a file name and location where reports will be stored temporarily. This will hold the data from one time of running the report. The next time the report is run the first file will be deleted and replaced with the new data. To select a file location to save the report click on the arrow to the right of the field and fill in the desired file name and directory location. The temp files need an "mdb" extension and those files may require MS Access 2000 or later to be read.

Which Report File to Edit

The following is a list of the possible MRP/MPS reports:

Mrp10	MRP Report (10 columns) sorted by assembly key
Mrp10pa	MRP Report sorted by planner code/assembly key
Mrp10pv	MRP Report sorted by planner code/vendor key
Mrp20	MPS Report (20 columns) sorted by assembly key
Mrp20pa	MPS Report sorted by planner code/assembly key
Mrp20pv	MPS Report sorted by planner code/vendor key

Material Requirement Planning



Add INMAST Sage PFW Fields to Report

This option is identical to the “Add INMAST” on the previously documented Production Schedule Report tab.

Add INLOC Sage PFW Fields to Report

This option is identical to the “Add INLOC” on the previously documented Production Schedule Report tab.

Save Temporary Report File as

This allows the user to select a file name and location where reports will be stored temporarily. This will hold the data from one time of running the report. The next time the report is run the first file will be deleted and replaced with the new data. To select a file location to save the report click on the arrow to the right of the field and fill in the desired file name and directory location. The temp files need an "mdb" extension and those files may require MS Access 2000 or later to be read.

Save Report File for Net Change Report

Checking this checkbox will save MRP reports for future use as the base file to run the Net Change report with. The file will be saved in the company directory under the following file name: Mryymmdd.MDB.

Use Custom Report Format

If you wish to use a custom report you may select to use it here.

Use Sub-Assembly Location

Which Report File to Edit

The following is a list of the possible MRP/MPS reports:

Mrp10	MRP Report (10 columns) sorted by assembly key
Mrp10pa	MRP Report sorted by planner code/assembly key
Mrp10pv	MRP Report sorted by planner code/vendor key
Mrp20	MPS Report (20 columns) sorted by assembly key
Mrp20pa	MPS Report sorted by planner code/assembly key
Mrp20pv	MPS Report sorted by planner code/vendor key

General

Format Numeric Output Fields

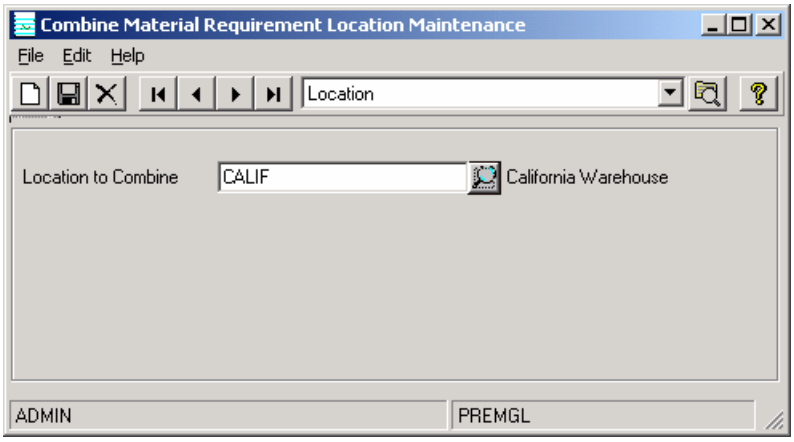
This option allows you to specify the number of decimal places to be printed on the Production Schedule Report and the Material Requirement Planning Report.

To print two decimal places, enter a format of 0.00

To print four decimal places, enter a format of 0.0000

Combine Material Requirements Location Maintenance

Overview



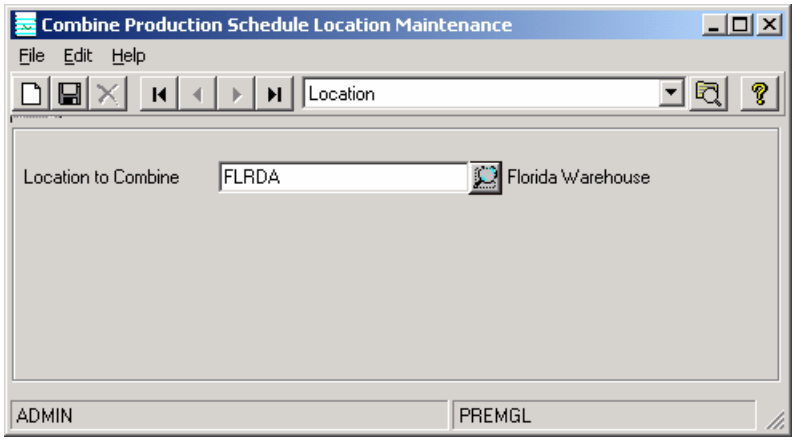
This allows for a single BOM to be used for multiple finished goods locations when importing via Open Order Commitment.

This option is to be used for companies that have multiple finished goods warehouses that make product in one location and then move it to others. (Also, the product is shipped from the other locations.) They want to track what is in the other locations and also want to sell from those locations. Normally you would have to maintaining multiple BOMs for each item - one for each location. This feature avoids this by triggering a translation table to be used by Open Order Commitment and Order Entry Preload. When either of those programs reads the sales order files and brings in the records, the locations on the records will be changed.

This same functionality can be found in the BOMP OOC Advanced features section of the BOMP Manual.

Combine Production Schedule Location Maintenance

Overview



This allows for a single BOM to be used for multiple finished goods locations when importing via Open Order Commitment.

This option is to be used for companies that have multiple finished goods warehouses that make product in one location and then move it to others. (Also, the product is shipped from the other locations.) They want to track what is in the other locations and also want to sell from those locations. Normally you would have to maintaining multiple BOMs for each item - one for each location. This feature avoids this by triggering a translation table to be used by Open Order Commitment and Order Entry Preload. When either of those programs reads the sales order files and brings in the records, the locations on the records will be changed.

This same functionality can be found in the BOMP OOC Advanced features section of the BOMP Manual.

Drop In Order Maintenance

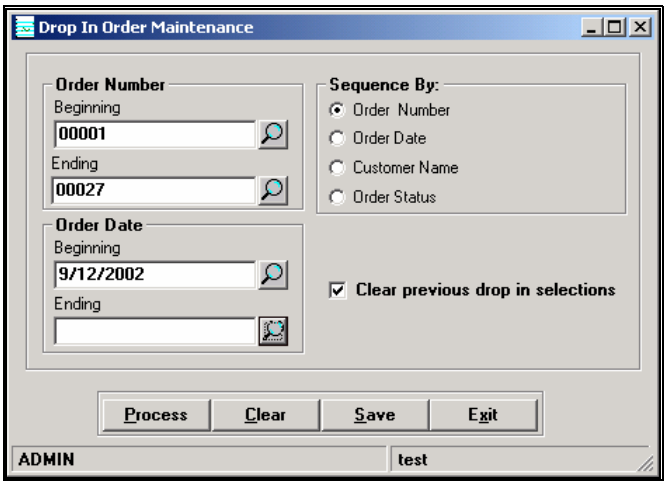
Overview

The Drop In Maintenance program allows the user to print a "Net Change" MRP report. You can select sales orders over a range of dates and/or order numbers to "Drop In" to the MRP Report. The MRP program would take the output from a previous MRP report, include the requirements from the drop in orders, and report the additional requirements. The report will NOT re-read the item location file or any other file to reflect the current status of inventory usage. It will assume that everything has been and/or will be built to plan, except for the added (drop in) orders.

Both the Drop In and Net Change programs use a base MRP report and compare to that. The difference is that the Drop-in adds only sales orders in our drop-in file. The Net Change report looks at the current BOMP files - committed to production, net available, etc. and recalculates the required to purchase based on those changes.

To use this program you must first go to the MRP Advanced Features program and check the "Save report file for Net Change Report" checkbox in the MRP tab. If this option is not checked then the standard MRP report will be run.

To use this feature first run the MPS report, a base MRP report, and then a series of drop-in or net change MRP reports. If another MPS report is run, then you MUST run another base MRP report.



Drop In Order Maintenance Field Definitions

Order Number

Here the user can select a range of order numbers to use in the Net Change Report.

Order Date

Here the user can select a range of dates to use in the Net Change Report.

Sequence By

Here the user can sequence the output of the Net Change Report by either Order Number, Order Date, Customer Name, or Order Status.

Clear Previous Drop In Selections

Checking this checkbox will clear all previously selected Drop In Data. If this is not checked then the new data will just be added to the existing data.

Drop In Step-by-Step

1. First, go into the MRP Advanced Features program. Under the Material Requirement Planning tab and check the flag for the "Save report file for Net Change report" field.
2. On Monday (or whatever base day you want to use) run the MRP as a normal report. That means that the "Print Net Change / Drop In Report" flag on the Drop In tab of the Material Requirements Planning report program is NOT checked.
3. Go into Drop In Maintenance
    a. Enter a range of Order numbers
    b. Decide if you want to clear previous selections or not and hit process. After the first time that the base report (#2, above) is run, the "Print Net Change / Drop In Report" flag MUST be checked.
    c. A list of orders appear. Select the ones that you want to be "dropped in" and then click the Save button. Care must be taken - in conjunction with the step above to insure that drop in orders are not duplicated.
4. In the Material Requirements Planning report:
    a. Go to the Drop In tab
    b. Check the Print flag
    c. Enter the name of the base report (MRyymmdd.mdb)
    d. Optionally check/enter data in the remaining fields and run the report.

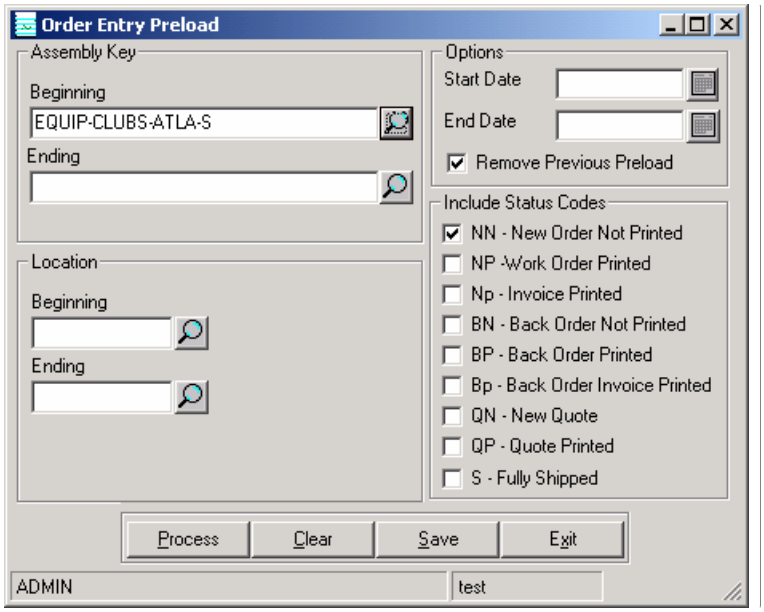
Note: The Drop In Report will save automatically as a temp file with the name MRyymmdd.mdb if you do not select anything in the MRP advanced features temporary file name field.

If a quantity on the sales order has changed, as long as you checked the committed to sales option in the original run of the report then the change in the quantity on the sales order would be noted on the report.

Order Entry Preload

Order Entry Preload Overview

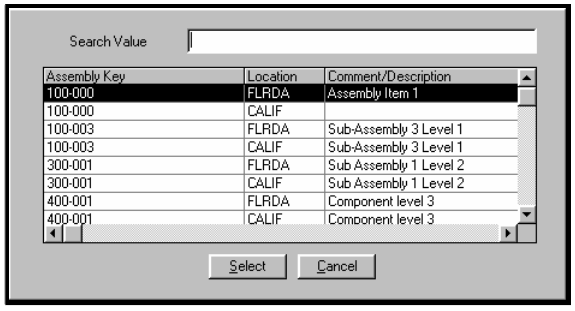
The Order Entry Preload utility allows users to populate the Production Schedule using orders that have been entered into Sage PFW. This utility is useful to companies that manufacture items on a make-to-order basis. The program reads the sales order module for orders with the specified order status and fills the assembly's planned quantity with the quantity remaining on the order. If the user has selected the "Allow modifications to pre-load" check box in the Defaults screen, then pre-loaded item quantities can be modified in the Production Schedule Maintenance screen.



Filters

Assembly Key

The magnifying glass icon located to the left of the Beginning and Ending fields will allow a search of available data.



The user may search for a specific item or location, by pressing the magnifying glass icon, entering part or all of the value in the "Search Value" box and then pressing the <ENTER> key. Once the desired record is highlighted press <ENTER> or the select button. The value will be inserted into the entry field.

Beginning

To search for orders with a specific Assembly Item or range of Assembly Items, then enter the first item in this field. If this field is left blank, the program will assume that you want to start with the first record.

Ending

Enter the last Assembly Item to search for in the sales order files. If this field is left blank, the program will assume that you want to end with the last record.

Location

BOMP's bills of material are unique to the Assembly Item Key + Location; therefore, this program will only find Assembly Items with the location specified in this field. If you specify an Assembly ABC with a Location of CALIF and the Sage PFW Order is for Assembly ABC in Location FLDA the item will not be loaded into the MPS Plan.

Beginning

If you want to search orders for a specific Location or range of Locations, then enter the first location in this field. If this field left blank, the program will assume that you want to start with the first record.

Ending

Enter the last Location to search for in the sales order files. If this field is left blank, the program will assume that you want to end with the last record.

You may use the Page Down, Page Up, Ctrl Home, and Ctrl End to navigate the search windows. The F3 function key will copy information from the Beginning field to the Ending Field.

Options

Start Date-End Date

The program will search the sales order Request Date Field using the date range entered into these fields.

Order Status

The order status comes from Sage PFW and relates to the current order status. Only orders that have this status will be loaded. Available status codes are:

- NN-New Order Not Printed
- NP-Work Order Printed
- Np-Invoice Printed
- BN-Back Order Not Printed
- BP-Back Order Printed
- Bp-Back Order Invoice Printed
- S-Fully Shipped
- QN-New Quote
- QP-Quote Printed

Remove Previous Preload

Selecting this check box will overwrite previously loaded plans. The user may leave the check box unselected to append orders from multiple order status codes to the current pre-loaded totals.

Tool Bar

Process

This option will begin the MPS Order Pre-load. The sales order module will be searched using the parameters entered into the screen.

Cancel

This option will exit the screen to the main menu without processing the pre-load.

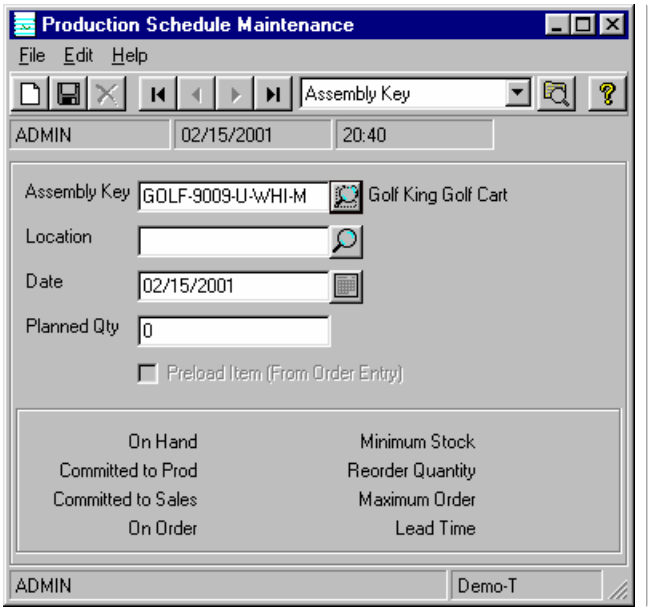
Production Schedule Maintenance

Production Schedule Maintenance Overview

This screen allows the entry and maintenance of the Production Forecasting Schedule. The Production Schedule Maintenance Grid Format screen allows you to enter and view the same information in a grid format. The user may run the Pre-load Orders utility and then use this screen to adjust pre-loaded quantities, add forecasting quantities, and/or add additional planned items. If your Production Schedule is not order driven, then this screen should be used to enter the schedule and forecasting. This program only allows planning of inventory items with an associated BOM in the Bill of Materials Processor program.

If you want to use this screen to view and modify pre-loaded schedule items, you must have the "allow modifications to pre-load" option selected in the Default screen.

To Plan for Independent Demand on Component Items: create a planning BOM that includes all items that require independent demand planning. The quantity should be set as a ratio to the planned quantity entered in Production Schedule Maintenance. The BOM can be modified before running the Production Schedule and Materials Requirement Report. The independent demand will then be included in your calculated report planned quantities.



Field Definitions

Assembly Key

This field allows you to zoom on all available Assembly Items. The Items shown have an associated BOM in the BOMP module. MRP/MPS reads the BOMP.MDB from the second path entered in the Company Setup screen.

You may use the Page Down, Page Up, Ctrl Home, and Ctrl End to navigate the search windows. The F3 function key will copy information from the Beginning field to the Ending Field.

Location

The user may plan for individual locations or use the “combine locations” option in the default screen. If the combine locations field is selected, then the location field will default to the location selected in the default screen and will be grayed out. If you are planning for specific locations, then enter or zoom to select the Assembly Location. BOMP’s bills of material are unique to the Assembly Item Key + Location; therefore, a BOM must exist for the planned Assembly Key and specified Location. The MPS and MRP report data will not be correct if plans are entered for an Assembly/Location combination that does not have a valid BOM in BOMP.

Date

This is the schedule date for the manufacture of the Assembly. The Order Pre-load utility populates the date field with the sales order’s request date.

Planned Quantity

This is the quantity to be manufactured. If you ran the Order Preload, then this field displays the sales order's order quantity.

View Only Field Definitions

On Hand

This field is view only and is pulled directly from Sage PFW's Inventory Location File.

Committed to Production

Calculated from open Commit transactions (that haven't been completed through a Manufactured transaction) posted through BOMP.

Committed to Sales

This field is view only and is pulled directly from Sage PFW's Inventory Location File.

On Order

The "On Order" quantity is derived from the quantity remaining on purchase orders that are open and the Assembly items that are posted using BOMP commit transactions. An example would be if you had an open PO with an item key of widget with a quantity remaining of 9, and one BOMP commit transactions for the assembly item widget with 5 committed. You would show 14 on order on in this field.

Minimum Stock

This field is view only and is pulled directly from Sage PFW's Inventory Location File.

Reorder Quantity

This field is view only and is pulled directly from Sage PFW's Inventory Item Location File.

Maximum Order

This field is view only and is pulled directly from Sage PFW's Inventory Location File.

Lead Time

This field is view only and is pulled directly from the Sage PFW field designated in the MRP/MPS defaults screen. The lead-time is calculated for each item and the item is put in the appropriate planning period.

Tool Bar

Save

This button must be selected to store new or modified information to the MRP.MDB file.

New

This button returns the screen to a blank form. New or modified information will be lost if the Save button is not selected before clearing the screen.

Delete

This button will permanently remove the displayed record from the live file.

File Menu

New (Ctrl + N)

This option returns the screen to a blank form. New or modified information will be lost if the Save button is not selected before clearing the screen.

Save (Ctrl + S)

This option stores new or modified information to the MRP.MDB file.

Delete

This option will permanently remove the displayed record from the maintenance table.

Find (Ctrl + F)

This option allows the user to search through the valid Keys. Enter a search value and then select the specific key. The selected key will be displayed on the screen.

First (F5)

This option displays the beginning record in the maintenance table.

Previous (F6)

Moves to the preceding record in the maintenance table.

Next (F7)

Moves to the subsequent record in the maintenance table.

Last (F8)

Displays the ending record in the maintenance table.

Exit

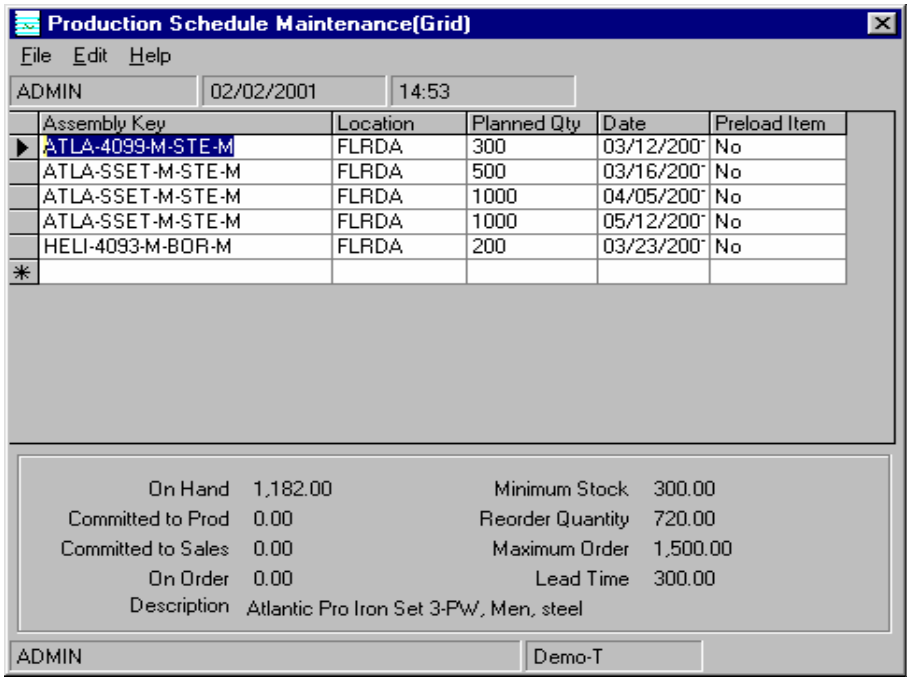
This button shuts down the current screen and the program returns to the Main Menu.

Production Schedule Maintenance (Grid Format)

Production Schedule Maintenance (Grid Format) Overview

The Production Schedule Maintenance Grid Format screen allows the entry and maintenance of the Production Forecasting Schedule. The user may run the Pre-load Orders utility and then use this screen to adjust pre-loaded quantities, add forecasting quantities, and/or add additional planned items. If your Production Schedule is not order driven, then this screen should be used to enter the schedule and forecasting. This program only allows planning of inventory items with an associated BOM in the Bill of Materials Processor program.

If you want to use this screen to view and modify pre-loaded schedule items, you must have the "allow modifications to pre-load" option selected in the Default screen.



Edit Menu

Lookup (F9)

This option allows you to zoom on all available Assembly Keys or Locations, depending on the column that is selected.

Copy Line (F3)

This option will copy the entire row that is above the selected row.

Restrict (F6)

Selecting the Restrict option allows you to schedule production for a selected inventory item. Only the selected item will be displayed in the grid.

Show All (F8)

Select this option to view all items in the production schedule.

Forecast Sales Listing

Forecast Sales Listing Overview

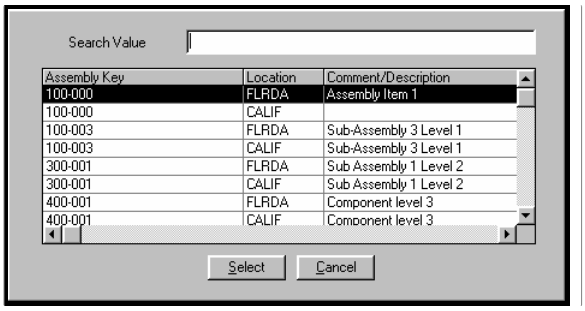
This report will list the Production Schedule plans that have been entered and/or pre-loaded between a specified range of dates, items, and locations. The listing will also show who entered the plan and when it was entered. If the Default Maintenance option to have a user-specified plan has been selected, then only plans entered by the user currently logged into they system will be printed.

Unneeded PO report. Shows current POs which are not needed, based on the MRP report.

Filters

Assembly Key

The magnifying glass icon located to the left of the Beginning and Ending fields will allow a search of available data.



The user may search for a specific item or location, by pressing the magnifying glass icon, entering part or all of the value in the “Search Value” box and then pressing the <ENTER> key. Once the desired record is highlighted press <ENTER> or the select button. The value will be inserted into the entry field.

Beginning

If you want to print the report for a specific Assembly Item or range of Assembly Items, then enter the first item in this field. If this field left blank, the program will assume that you want to start with the first record.

Ending

Enter the last Assembly Item that the program will include in the report. If this field is left blank, the program will assume that you want to end with the last record.

Location

BOMP's bills of material are unique to the Assembly Item Key + Location; therefore, this program will only find Assembly Items with the location specified in this field. If you specify an Assembly ABC with a Location of CALIF and the Sage PFW Order is for Assembly ABC in Location FLDA the item will not be loaded into the MPS Plan.

Beginning

If you want to search orders for a specific Location or range of Locations, then enter the first location in this field. If this field left blank, the program will assume that you want to start with the first record.

Ending

Enter the last Location that the program will search for in the sales order files. If this field is left blank, the program will assume that you want to end with the last record.

You may use the Page Down, Page Up, Ctrl Home, and Ctrl End to navigate the search windows. The F3 function key will copy information from the Beginning field to the Ending Field.

Date

The listing will print all planned assembly items that fall in the date range entered in these fields.

Print Destination

Window

Prints the report to a Crystal Reports screen. Please see the Standard Reports-Crystal Reports section of this manual for more information on using the Crystal Reports screen.

Printer

Prints the report to the default printer specified in Windows.

Disk

Exports the report to a specified file type. Microsoft export DLL Files are required to use this options, these files can be obtained through the IndustriOS technical support.

Tool Bar

Print

Prints the report to the specified print destination.

Clear

This button returns the screen to a blank form. New or modified information will be lost if the Save button is not selected before clearing the screen.

Exit

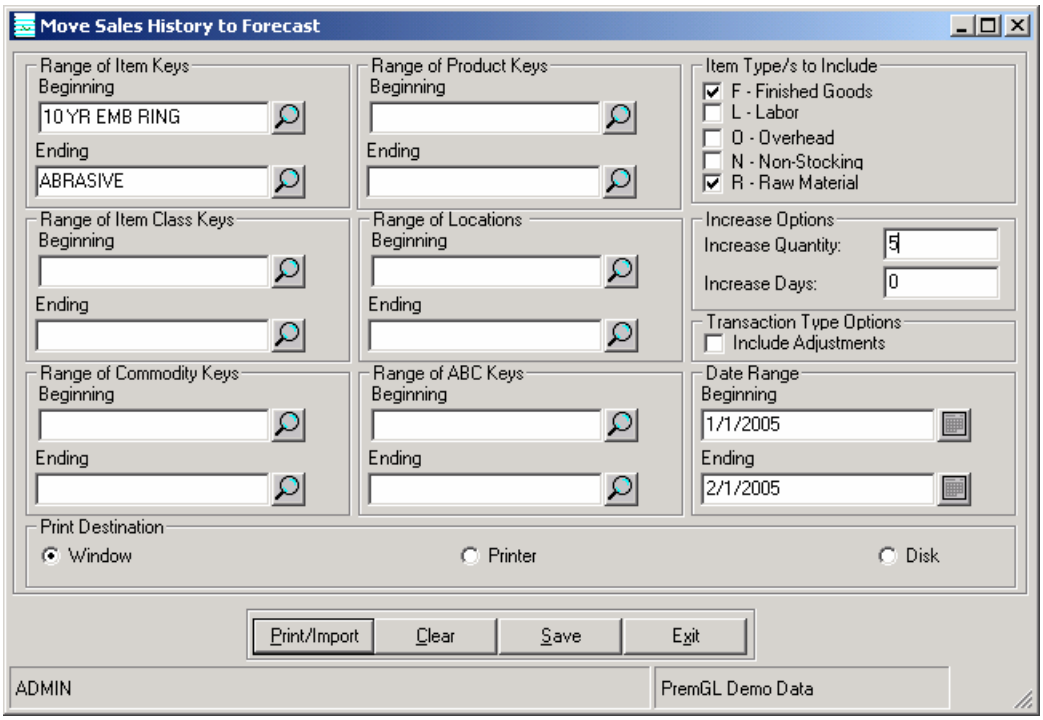
This button shuts down the current screen and the program returns to the Main Menu.

Move Sales History to Forecast

Overview

This program moves historical sales information into the MRP forecast. Once it is moved it is viewable and modifiable in the grid.

The multitude of ranges is important because companies may want a 10% increase in one product line, a 5% decrease in another, and so on. We recommend that you save the different settings, so that, if one product line is done incorrectly, you can purge the forecast and start over, without having to re-enter all of the parameter sets.



Range Options

Range of Item Keys

Here the user can type or zoom to select the desired range of Item Keys.

Range of Item Class Keys

Here the user can type or zoom to select the desired range of Item Class Keys.

Range of Commodity Keys

Here the user can type or zoom to select the desired range of Commodity Keys.

Range of Product Keys

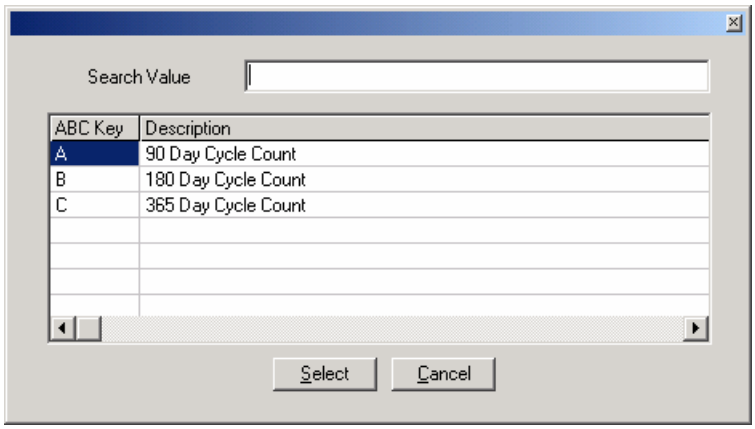
Here the user can type or zoom to select the desired range of Product Keys.

Range of Locations

Here the user can type or zoom to select the desired range of Locations.

Range of ABC Keys

Here the user can type or zoom to select the desired range of ABC Keys. An example is shown below.



Date Range

Here the user can type or zoom to select the desired range of Dates.

Transaction Type Options

Include Adjustments

If this option is selected then the report will include negative sales transactions.

Increase Options

Increase Quantity

This field allows the user to make a percent change (positive or negative). It is used to modify the historical quantities. 10 will be interpreted as a 10% increase, changing a quantity of 100 to 110. A zero percent (0%) means no change - 100 stays 100.

Increase Days

The date from the selected data will be modified by adding this number of days. The new date would be used in the forecast table, along with the modified quantity. If I wanted to use numbers from last Spring, add 10% and use them as a forecast for this spring, I would put in dates for last Spring (3/23/04 to 5/31/04), check the sales flag, check the move flag, put 10% in the new modify quantity field, and put 365 in the modify date field. Therefore, a historical transaction date 4/1/04 would be in the forecast with a date of 4/1/05, and a historical transaction with a date of 5/10/04 would be put in the forecast with a date of 5/10/05.

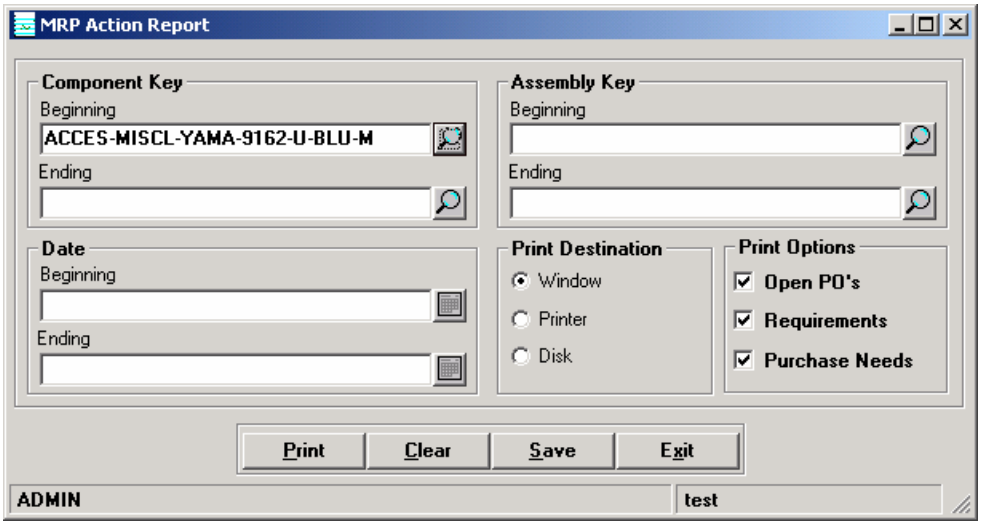
Item Type Options

Here the user can specify what item types are to be included in the report.

MRP Action Report

Overview

The MRP Action Report calculates Available, and on order and if the required quantity in BOMP is greater than Available and on order it will recommend a purchase of the needed quantity.



Filters

Note: normally the sort would be by component key or Date UNLESS you do not have the PO option selected. Then you could also sort by Assembly key.

Component Key

Here the user can select a range of Component Keys to run the Action Report with.

Date

Here the user can select a range of Dates to run the Action Report with.

Assembly Key

Here the user can select a range of Assembly Keys to run the Action Report with.

Print Destination

Window

If this option is selected then the report output will just show on your screen.

Printer

If this option is selected then the report output will print on the selected printer.

Disk

If this option is selected then the report output will be saved to disk.

Print Options

Open POs

If this option is selected then open Purchase Order information will be printed.

Requirements

If this option is selected then BOMP Requirements will print. If you had 30 on hand and need 40, this would detail the need for the 40.

Purchase Need

If this option is selected then purchase requirements will be printed in the report. This is the same as the BOMP requirements, except if you have 30 and need 40, then only the requirements for the additional 10 would be shown. If you have three open jobs with quantities of 15, 21, and 4, then the report will show the need for 6 from the second job and the 4 from the third job.

Material Requirement Planning

Material Requirement Planning Overview

The Material Requirements Report computes the component quantities that are required to produce the finished good items generated by the Production Schedule Report. This report includes the option to create Purchase Orders for all generated raw material items. The purchase orders may be viewed, modified, and posted through the Sage PFW's Purchase Order Module.

You will need to assign an Item Type (In Sage PFW) of "F" for your sub-assemblies or the MPS and MRP reports will not print correct results.

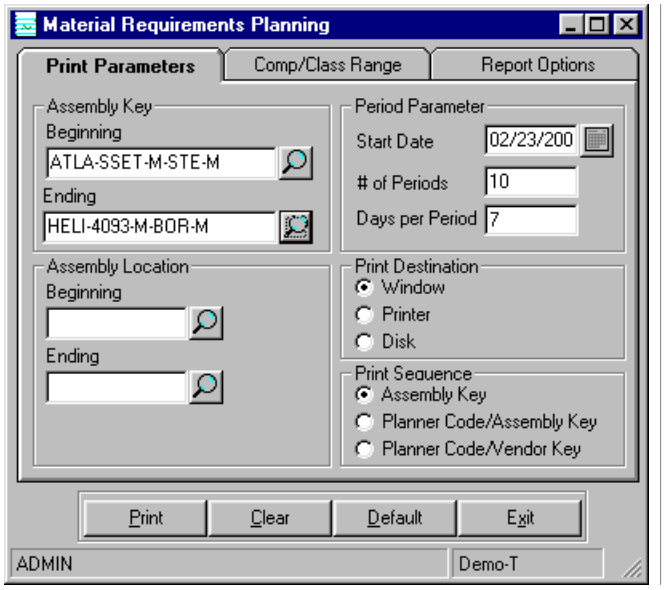
It is strongly recommended for the typical MPS/MRP run that the Production Schedule be run with the "Include sub-assemblies requirements" option NOT selected. Also, the Material Requirements Planning report should be run at the "Raw Level" and that the Calculate Requirements Using should be set to "Production quantities generated from production schedule report". The other options are there to give the user increased flexibility. For example, the Schedule Jobs option allows the user to see ONLY the requirements from currently scheduled jobs in the Shop Floor Control Module.

Printed Fields Definitions

Purchase Quantity

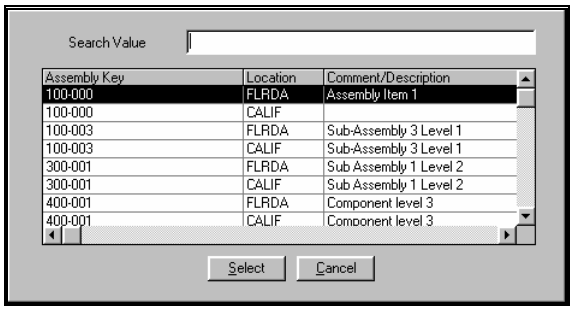
The report will include a "Purchase" field that calculates the amount to be ordered. This is the quantity needed to keep inventory from going negative. If the Minimum stock quantity is displayed then purchase will be filled to the quantity that will keep inventory at that level. Also, if the reorder quantity is displayed the purchase quantity will be limited to quantities divisible by the reorder amount. The create purchase orders option will use the purchase quantity when generating Purchase orders. You may select the option to only print the items that need to be purchased as associated with above item

Print Parameters



Assembly Key

The magnifying glass icon located to the left of the Beginning and Ending fields will allow a search of available data.



The user may search for a specific item or location, by pressing the magnifying glass icon, entering part or all of the value in the "Search Value" box and then pressing the <ENTER> key. Once the desired record is highlighted press <ENTER> or the select button. The value will be inserted into the entry field.

Beginning

If you want to print the report for a specific Assembly Item or range of Assembly Items, then enter the first item in this field. If this field left blank, the program will assume that you want to start with the first record.

Ending

Enter the last Assembly Item that the program will include in the report. If this field is left blank, the program will assume that you want to end with the last record.

Location

BOMP's bills of material are unique to the Assembly Item Key + Location; therefore, this program will only find Assembly Items with the location specified in this field. If you specify an Assembly ABC with a Location of CALIF and the Sage PFW Order is for Assembly ABC in Location FLDA, then the item will not be loaded into the MPS Plan.

Beginning

If you want to search orders for a specific Location or range of Locations, then enter the first location in this field. If this field left blank, the program will assume that you want to start with the first record.

Ending

Enter the last Location that the program will search for in the sales order files. If this field is left blank, the program will assume that you want to end with the last record.

Period Parameter

The Materials Requirement report is printed using user defined planning periods. The report prints the combined component quantities that are required for each of the defined planning periods.

Start Date

Enter the date to be used as the beginning date of the first period.

Number of Periods

Enter a numeric value between 1-20 to be used as the number of planning periods.

Days Per Period

Enter a numeric value to be used as the number of days to be included in each planning period.

Print Destination

Window

Prints the report to a Crystal Reports screen. Please see the Standard Reports-Crystal Reports section of this manual for more information on using the Crystal Reports screen.

Printer

Prints the report to the default printer specified in Windows.

Disk

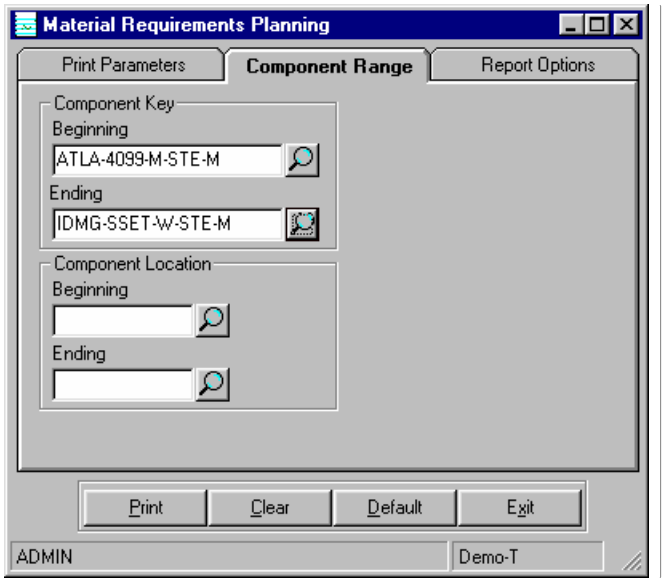
Exports the report to a specified file type. Microsoft export DLL Files are required to use this options, these files can be obtained through the IndustriOS technical support.

Print Sequence

The MRP Report may now be printed in the following sequences:

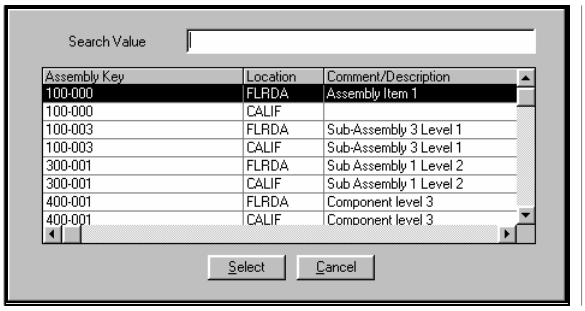
- Assembly Key
- Planner Code/Assembly Key
- Planner Code/Primary Vendor Key

Component Range



Component Key

The magnifying glass icon located to the left of the Beginning and Ending fields will allow a search of available data.



The user may search for a specific item, by pressing the magnifying glass icon, entering part or all of the value in the "Search Value" box and then pressing the <ENTER> key. Once the desired record is highlighted press <ENTER> or the select button. The value will be inserted into the entry field.

Beginning

If you want to print the report for a specific Component Item or range of Component Items, then enter the first item in this field. If this field left blank, the program will assume that you want to start with the first record.

Ending

Enter the last Component Item that the program will include in the report. If this field is left blank, the program will assume that you want to end with the last record.

Location

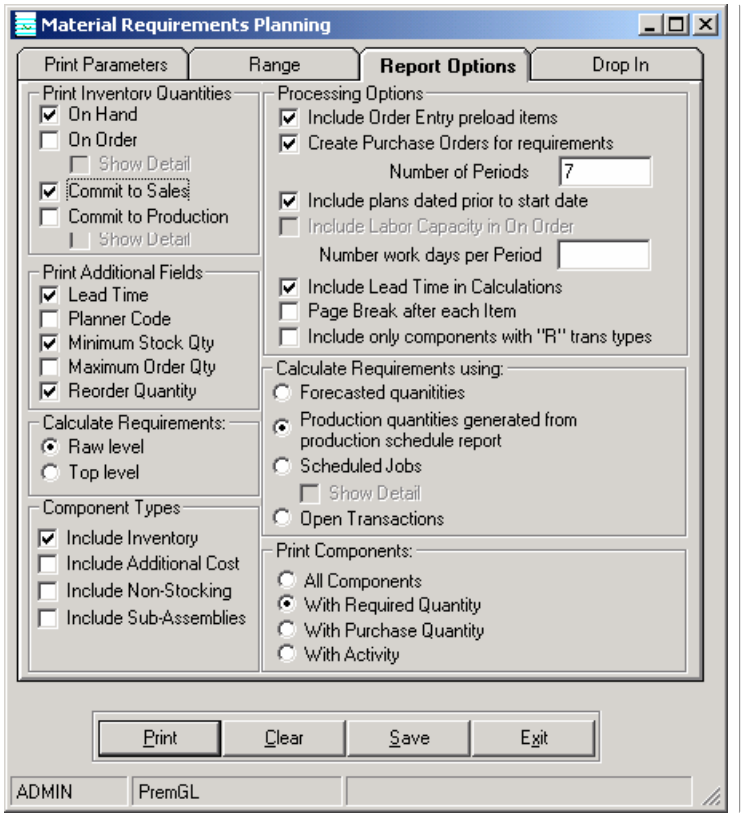
Beginning

If you want to search orders for a specific Location or range of Locations, then enter the first location in this field. If this field left blank, the program will assume that you want to start with the first record.

Ending

Enter the last Location that the program will search for in the sales order files. If this field is left blank, the program will assume that you want to end with the last record.

Report Options



Print Inventory Quantities

On Hand

The first period displays the Item's on hand quantity as pulled directly from Sage PFW's Inventory Location File. Each period following the first period displays the forecasted On Hand Quantity or the On Hand quantity if the planned quantity is ordered.

On Order

The "On Order" quantity is derived from the quantity remaining on purchase orders that are open and the Assembly items that are posted using BOMP commit transactions. An example would be if you had an open PO with an item key of widget with a quantity remaining of 9, and one BOMP commit transactions for the assembly item widget with 5 committed. You would show 14 on order on in this field. (Open PO's would decrease the amount available and be stored in the on order row.)

On Order - Show Detail

This option will show the PO detail. In other words if we have an open order on a certain date it will show what purchase order created that need. This list will print following the data for each raw material.

Commit to Sales

Prints the Item's committed to sales quantity as pulled directly from Sage PFW's Inventory Location File. (Open Sales orders would decrease the amount available and be stored in the Commit to Sales row.)

Commit to Production

This field is calculated from open Commit transactions (that haven't been completed and closed through a Manufacture transaction) posted through BOMP. (Open commit transactions would increase the amount available in the on order row if they are found in the history header table. This means that they are in the process of being built and there will soon be more available.)

Commit to Prod - Show Detail

This will display the transactions in BOMP that created the need being displayed in the MRP Report. This list will print immediately following the PO detail if that option is chosen. Otherwise it will print immediately following the current data for each component.

Print Additional Fields

Lead Time

Prints the Item's lead-time as pulled directly from the Sage PFW file set in the MRP/MPS Default Maintenance screen.

Here is a brief explanation of how the lead time calculation works. If an item is required on January 26th and there is insufficient quantity and if there is a 14 day lead time, then the program will show:

The requirement on the 26th

The need to purchase some of it on January 12th - in MRP for components.

The need to manufacture some of it on January 12th - in MPS for assemblies or sub-assemblies.

The amount to be purchased or made is a multiple of the restocking quantity.

Insufficient quantity means that the on-hand quantity will drop below the minimum quantity level.

Planner Code

Prints the Item's planner code as pulled directly from the Sage PFW file set in the MRP/MPS Default Maintenance screen.

Minimum Stock Quantity

Prints the Item's minimum stock quantity as pulled directly from Sage PFW's Inventory Item Location File. The MPS report will calculate and print the quantity required be ordered for each item. If this field is selected, the calculation used to determine the required order quantity will include the minimum stock quantity. In addition, if the Reorder Quantity field is selected, the purchase quantity will be

limited to quantities divisible by the reorder amount. The create purchase orders option will use the purchase quantity when generating Purchase orders

Maximum Order Quantity

Prints the Item's maximum order quantity as pulled directly from Sage PFW's Inventory Item Location File.

Reorder Quantity

Prints the Item's reorder quantity as pulled directly from Sage PFW's Inventory Item Location File. The MPS report will calculate and print the quantity required be ordered for each item. If this field is selected, the calculation used to determine the required order quantity will include the minimum stock quantity. In addition, if the Reorder Quantity field is selected, the purchase quantity will be limited to quantities divisible by the reorder amount. The create purchase orders option will use the purchase quantity when generating Purchase orders

Calculate Requirements

Raw level

Computes the report quantities by using the lowest level component items; therefore, the inventory quantities for the sub-assemblies will not be considered when processing the report. This report shows purchasing which raw material items need to be ordered for each production-planning period.

Top level

Computes the report quantities by using the top level component items and sub-assemblies; therefore, any components that are used to build the sub-assemblies will not be considered in the report. This report displays the top-level components and sub-assemblies that are needed to be ordered/built for each production planning period.

Component Types

Include Inventory

If this option is selected then valid inventory items will print on the report.

Include Non-Stocking

If this option is selected the report will display Sage PFW items that are defined as non-stocking.

Include Sub-Assemblies

If this option is selected then sub-assemblies will be included in the report.

Processing Options

Include Order Entry Preload Items

Selecting this option will print all of the Order Entry Preload Assembly Items.

Create Purchase Orders for Requirements

Selecting this option will generate purchase orders from the MRP reports. The purchase order cost is calculated using the cost field specified in the Purchase Order Application Setup program. ("Unit Cost Default Method") The purchase orders can be viewed, modified, and posted through Sage PFW's Purchase Order module. Please see the Sage PFW PO Interface chapter of this manual for more information.

Include Quantities Dated Prior to Start Date

Selecting this option will include any planned quantities that are required before the start date. These items will be put in the first planning period.

Include Additional Cost Items

Includes the Additional Cost Items from BOMP's Additional Cost Maintenance screen are on the report. If you do not select this option, then the planned quantity for the Additional Cost Items is not displayed.

Include Labor Capacity in On Order

If this box is checked then the Labor Capacity will be included in the On Order line of the MRP Report.

Include Lead Time in Calculations

Calculates the lead-time for each component and schedules the component for the date it should be ordered.

Page Break after each Item

This will add a page break after each item. We recommend this option especially if you have selected either of the detail options in MRP Advanced Features, as this will make the report much easier to read.

Calculate Requirements Using

Forecasted Quantities

If this option is selected then the required line in the MRP report will be based on the Forecasted line in the Production Schedule Report. In other words, you want to base your purchases on forecasted sales only. If this option is selected then quantities available and committed to sales are not taken into account.

Production Quantities generated from Production Schedule Report

For this option, the required line in the MRP Report will be based on the Start Production line in the Production Schedule Report. Or in other words, this option should be used if you want to base your purchases on the amount that you need to make, which is based on what the Production Schedule Report says you need to make, which can be more or less than the forecasted quantity.

Note: If you include sub-assemblies in the Production Schedule report and then calculate MRP requirements using the production quantities, the MRP report will be incorrect, as it will add the requirements from both the top assembly and each of the sub assemblies.

Schedule Jobs

This option allows the added flexibility of running MRP for scheduled jobs only. Forecasted quantities are not taken into account if this option is selected. This assumes that the scheduled jobs (assemblies) need to be started on the schedule start date, so the components must be in stock on the schedule start date. So if this option is selected the required line in the MRP report will be based on scheduled jobs in Shop Floor Control.

Open Transactions

This will only process components that are on the open transaction report (in BOMP).

Print Components

All Components

If this option is selected all valid components will print on the report.

With Required Quantity

If this option is checked then the component will only print if there is a required quantity.

With Purchase Quantity

If this option is selected then all components with a purchase quantity will print on the report.

With Activity

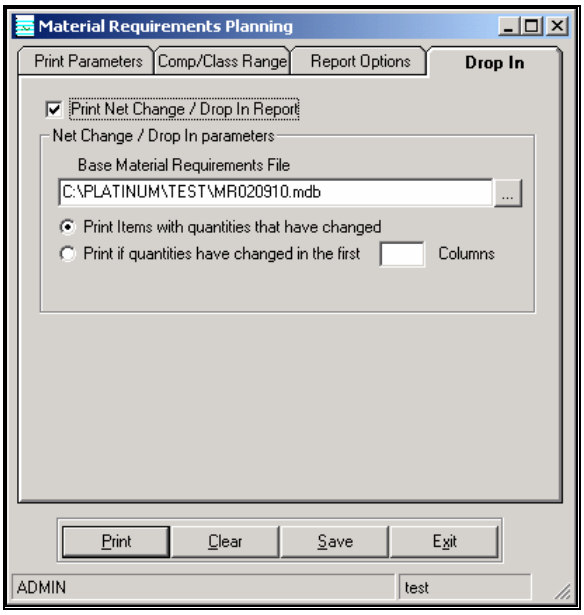
This option will print only items with activity. Activity would be defined as anything on the REQUIRED or PURCHASE line. If On-Order, commit to sales or commit to production are checked, than any non-zero quantity on any of those lines would also be activity.

Drop In

Overview

The Drop In tab allows users to print a "Net Change" MRP report. The sales orders selected in Drop In Maintenance will "Drop In" to the MRP Report. The MRP program would take the output from a previous MRP report, include the requirements from the drop in orders, and report the additional requirements. The report will NOT re-read the item location file or any other file to reflect the current status of inventory usage. It will assume that everything has been and/or will be built to plan, except for the added (drop in) orders.

To use this program you must first go to the MRP Advanced Features program and check the "Save report file for Net Change Report" checkbox in the MRP tab. Then run the MRP report that you want the Drop In report to be compared against. If the "Save report file for Net Change Report" option is not checked then the standard MRP report will be run.



Drop In Tab Field Definitions

Print Net Change / Drop In Report

If this checkbox is checked, then when the process button is selected then either a Net Change or a Drop In report will be run showing the change from the original MRP report. The original report is the one selected as the base material requirements file.

Both the Drop In and Net Change programs use a base MRP report and compare to that. The difference is that the Drop-in adds only sales orders in our drop-in file. The Net Change report looks at the current BOMP files - committed to production, net available, etc. and recalculates the required to purchase based on those changes.

To print a Net Change report go into the Material Requirements Planning program and select the Print Net Change/ Drop In report checkbox also check the Net Change Report checkbox.

To print a Drop In report go into the Material Requirements Planning program and select the Print Net Change/ Drop In report checkbox but DO NOT check the Net Change Report checkbox.

Base Material Requirements File

The original MRP file that the Net Change/Drop In orders will be compared against.

To save this file, go to MRP Advanced Features and check the "Save report file for the Net Change report" checkbox. The file will be saved in the company directory under the following file name: Mryymmdd.MDB.

Print Items With Quantities That Have Changed

If this option is selected then only items where the quantity has changed will show up on the report.

Print if Items Have Changed in the First __ Columns

If this option is selected then only items where the quantity has changed in the selected number of columns will show up on the report.

Net Change Report Differences

The output of the Net Change Report will be similar to the MRP output, except that the "Purchase" row will be replaced with three rows: "Original Purchase" (from the BASE temporary report file), "Revised Purchase" (as calculated in this run), and "Net Change Purchase", which is the difference of the other two rows.

Tool Bar

Print

This button will print the report to the specified print destination.

Clear

This button returns the screen to a blank form. New or modified information will be lost if the Save button is not selected before clearing the screen.

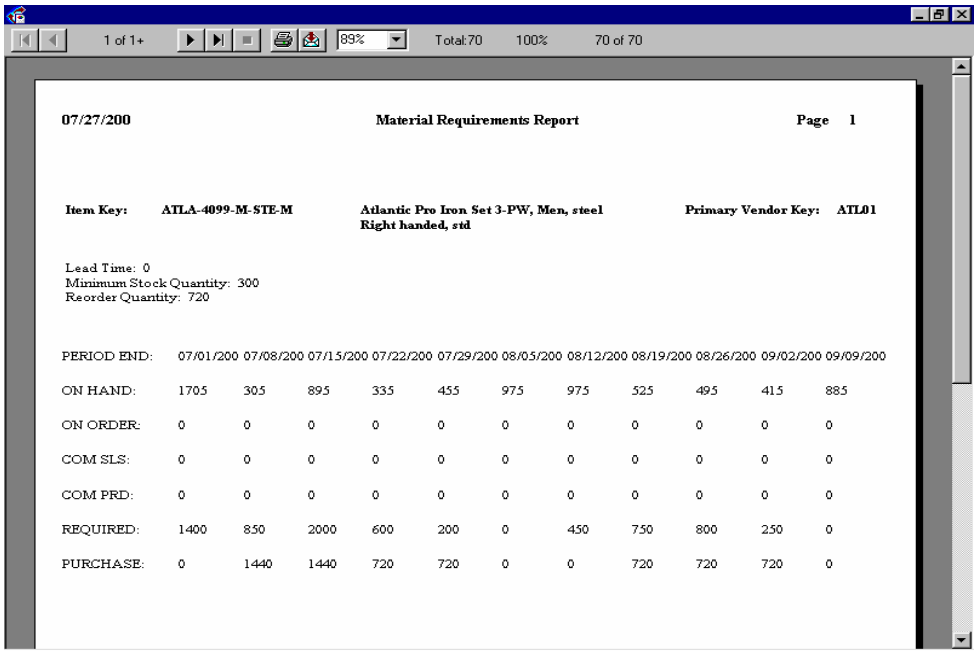
Default

Selecting this button will save the current report parameters for future use.

Exit

This button shuts down the current screen and the program returns to the Main Menu.

Report



PERIOD END

The ending dates for each of the planning periods. These dates are the dates set in the Period Parameter section of the Print Parameters tab for the Production Schedule Report.

ON HAND

The number of the Item that is on hand in inventory. This information is taken from the Sage PFW Inventory files.

ON ORDER

This field shows the number of the Item that is on order. This information is taken from Sage PFW.

COM SLS

This field shows the number of the Item that has been committed to sales in BOMP.

COM PRD

This field shows the number of the Item that has been committed to production by commit BOMP transactions.

REQUIRED

This field shows the total number of Items needed on the date based on the options chosen in the MRP report parameters.

PURCHASE

This field shows the number of the Item that has been purchased through purchase transactions in Sage PFW.

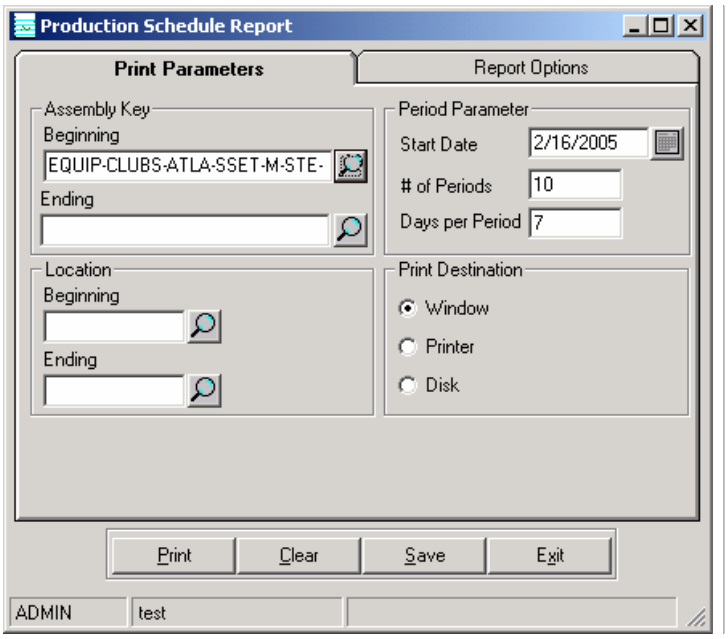
Production Schedule Report

Production Schedule Report Overview

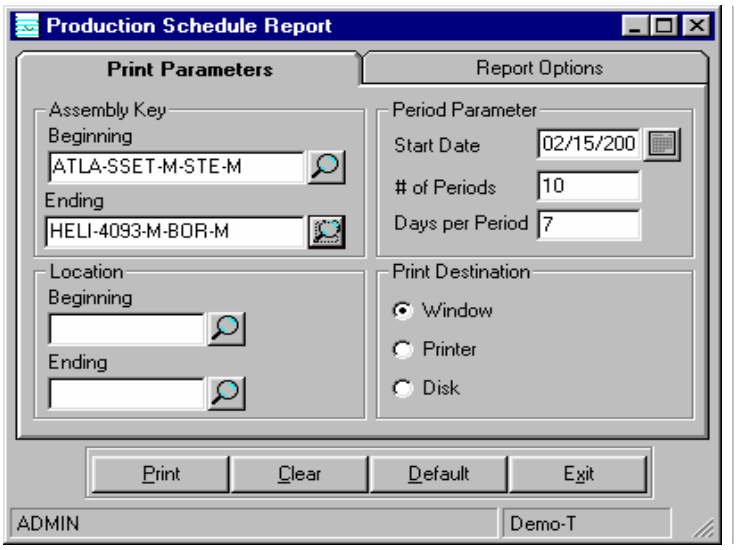
The Production Schedule Report is generated for all finished good items that need to be manufactured in order to fulfill the production plans formulated in the Production Schedule Entry program. An option is included to auto-generate transactions within the Bill of Materials Processor for the Assembly Items that need to be manufactured.

Note: sub-assemblies should not appear on this report. If they do, it is because they have been set up with the wrong item type in the Item Master File. Sub-assemblies should be set to a type of F.

It is strongly recommended for the typical MPS/MRP run that the Production Schedule be run with the "Include sub-assemblies requirements" option NOT selected. Also, the Material Requirements Planning report should be run at the "Raw Level" and that the Calculate Requirements Using is set to "Production quantities generated from production schedule report". The other options are there to give the user increased flexibility. For example, the Schedule Jobs option allows the user to see ONLY the requirements from currently scheduled jobs in the Shop Floor Control Module.

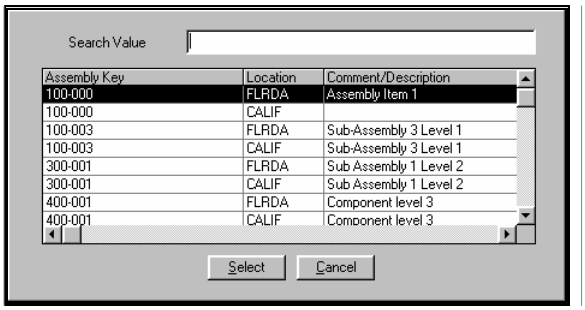


Print Parameters



Assembly Key

The magnifying glass icon located to the left of the Beginning and Ending fields will allow a search of available data.



The user may search for a specific item or location, by pressing the magnifying glass icon, entering part or all of the value in the "Search Value" box and then pressing the <ENTER> key. Once the desired record is highlighted press <ENTER> or the select button. The value will be inserted into the entry field.

Beginning

If you want to print the report for a specific Assembly Item or range of Assembly Items, then enter the first item in this field. If this field left blank, the program will assume that you want to start with the first record.

Ending

Enter the last Assembly Item that the program will include in the report. If this field is left blank, the program will assume that you want to end with the last record.

Location

BOMP's bills of material are unique to the Assembly Item Key + Location; therefore, this program will only find Assembly Items with the location specified in this field. If you specify an Assembly ABC with a Location of CALIF and the Sage PFW Order is for Assembly ABC in Location FLDA, then the item will not be loaded into the MPS Plan.

Beginning

If you want to search orders for a specific Location or range of Locations, then enter the first location in this field. If this field left blank, the program will assume that you want to start with the first record.

Ending

Enter the last Location that the program will search for in the sales order files. If this field is left blank, the program will assume that you want to end with the last record.

You may use the Page Down, Page Up, Ctrl Home, and Ctrl End keys to navigate the search windows. The F3 function key will copy information from the Beginning field to the Ending Field.

Period Parameter

The Production Schedule report is printed using user defined planning periods. The report reads the date entered for the Assembly in the Production Schedule

Maintenance screen and combines all planned quantities into the defined planning periods.

Start Date

Enter the date to be used as the beginning date of the first period.

Number of Periods

Enter a numeric value between 1-20 to be used as the number of planning periods.

Days Per Period

Enter a numeric value to be used as the number of days to be included in each planning period.

Print Destination

Window

Prints the report to a Crystal Reports screen. Please see the Standard Reports-Crystal Reports section of this manual for more information on using the Crystal Reports screen.

Printer

Prints the report to the default printer specified in Windows.

Disk

Exports the report to a specified file type. Microsoft export DLL Files are required to use this options, these files can be obtained through the IndustriOS technical support.

Tool Bar

Print

Prints the report to the specified print destination.

Clear

This button returns the screen to a blank form. New or modified information will be lost if the Save button is not selected before clearing the screen.

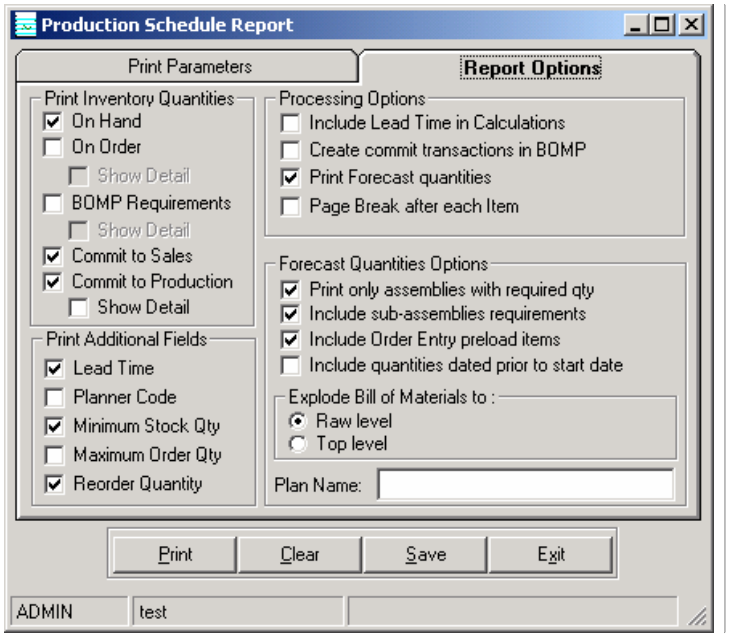
Default

Saves the entered report parameters.

Exit

This button shuts down the current screen and the program returns to the Main Menu.

Report Options



Print Inventory Quantities

On Hand

The On Hand quantity is the balance shown in inventory as being physically present at the stocking location. The printed on hand quantity in the first period is pulled directly from Sage PFW's Inventory Location File. Each planning period following the first period displays the forecasted On Hand Quantity or the quantity that will be on hand if the planned quantity is manufactured.

On Order

The "On Order" quantity is derived from the quantity remaining on purchase orders that are open and the Assembly items that are posted using BOMP commit transactions. An example would be if you had an open PO with an item key of widget with a quantity remaining of 9, and one BOMP commit transactions for the assembly item widget with 5 committed. You would show 14 on order on in this field.

Show Detail

If this is checked then the detail will be shown for both On Hand and On Order.

BOMP Requirements

If this checkbox is checked then all open WIP transactions will be displayed. They will print on the report as "PLANNED QUANTITY" and will be added to the current totals.

Show Detail

If this is checked then the individual WIP transactions will be listed on the report.

Commit to Sales

Prints the Item's committed to sales quantity, which is the total of all the open sales orders.

Note: Do not check the Commit to Sales box if you have run a preload or it will cause orders to be counted twice!

Commit to Production

Calculated from Commitments posted through BOMP (that have not been closed out by a manufacture transaction).

Show Detail

If this is checked then the detail will be shown for both Commit to Sales and Commit to Production items in the report.

Print Additional Fields

Lead Time

The lead-time of the assembly item is the amount of time that normally elapses between the time a work order is issued to production and the receipt of the item into stock or when it is shipped. The Assembly Item's lead-time as pulled directly from the Sage PFW file set in the MRP/MPS Default Maintenance screen.

Planner Code

Prints the Item's planner code as pulled directly from the Sage PFW file set in the MRP/MPS Default Maintenance screen.

Minimum Stock Quantity

Prints the Item's minimum stock quantity as pulled directly from Sage PFW's Inventory Location File.

Maximum Stock Quantity

Prints the Item's maximum stock quantity as pulled directly from Sage PFW's Inventory Location File.

Reorder Quantity

Prints the Item's reorder quantity as pulled directly from Sage PFW's Inventory Location File.

Processing Options

Include Lead Time in Calculations

Selecting this option will use the lead-time (field specified in Default Maintenance) when calculating when the planned item will be completed on put on hand. For example: If an item is planned for 10/1/99 and the item has a lead time of 30 days, then the report will show the item in the period which includes 10/31/99. The lead-time is configured using actual days, not workdays.

Create Commit Transactions in BOMP

Selecting this option will generate BOMP transactions for all Assemblies with a planned quantity. The transactions are imported into BOMP's Transaction Entry screen, where they can be viewed and/or modified then posted to Sage PFW. See the BOMP Interface Chapter for more information.

Print Forecast Quantities

Prints the forecast quantities in the report output, as they were entered or preloaded into the Production Schedule Entry programs.

Forecast Quantity Options

Print Only Assemblies with Planned Quantity

If this option is not selected the report will print a section for each Assembly Item, regardless of planned quantity. If this option is selected then only Assembly Items with a planned quantity will be printed.

Include Sub-Assemblies Requirements

Selecting this option will include planned quantities on the report that are sub-assemblies of other planned Parent Assembly Items.

```
FOR EXAMPLE: Assembly XYZ has a planned quantity of
20 for the month.  Assembly XYZ requires two of Sub-
Assembly ABC.  Sub-Assembly ABC has a planned
quantity of 100 for the next month.  If this box is
selected, the plan for ABC in the current month will
be 140: 100 + (2 * 20).  If the box is left blank,
the plan for the month is 100.
```

Note: If you include sub-assemblies in the Production Schedule report and then calculate MRP requirements using the production quantities, the MRP report will be incorrect, as it will add the requirements from both the top assembly and each of the sub assemblies.

Include Order Entry Preload Items

Selecting this option will print all of the Order Entry Preload Assembly Items.

Include Quantities Dated Prior to Start Date

Selecting this option will include any planned quantities that are required before the start date. These items will be put in the first planning period.

Explode Bill of Materials To

Top level

Computes the report quantities by using the top level component items and sub-assemblies; therefore, any components that are used to build the sub-assemblies will not be considered in the report.

Raw level

Computes the report quantities by using the lowest level component items; therefore, the inventory quantities for the sub-assemblies will not be considered when processing the report.

Tool Bar

Print

Prints the report to the specified print destination.

Clear

This button returns the screen to a blank form. New or modified information will be lost if the Save button is not selected before clearing the screen.

Default

Saves the entered report parameters.

Exit

This button shuts down the current screen and the program returns to the Main Menu.

Scheduled MRP

Overview

This feature allows the user to run the MRP report as a scheduled task. The task scheduler is different on different versions of Windows. The user is responsible for determining how it works on their system. This means that the user must be able to successfully create a scheduled job for a different task and have the system start that program on schedule. We tested the task scheduler using the Acrobat Reader. After we got this program to run as scheduled, we then scheduled the MRP program.

As we tested this on an XP system, our most common error was that we had an incorrect user name or password. You need to get pass this and other scheduler errors prior to contacting us for assistance.

The first step is to go into the MRP program and save the desired parameters. There are 10 choices for the name of the parameter set: BATCH and BATCH1 through BATCH9. We strongly recommend that you run the program to insure that the parameters give you the desired results.

We strongly recommend that the output goes to the printer and that you save the temporary report - see MRP Advanced Features. Do not output to a disk file, as the program requests a file name when it is run with this option.

For XP:

Go to the Control Panel

Select Schedule Tasks

Click on Add Scheduled Task

Go through the setup wizard.

When you get to the screen where you are to choose the program to be run, click on the "Browse" button.

Go to the drive and then the folder where the MSS from IndustriOS programs are installed.

Select the MRPREP.exe program.

Prior to clicking on the Finish button, click on "Open Advanced Properties" button.

On the task tab of the advanced Properties screen, modify the Run field to include the name of the saved parameters (i.e.: batch1, batch2, standard, etc.)

It is important to enter the computer's user name and password.

For Windows 98:

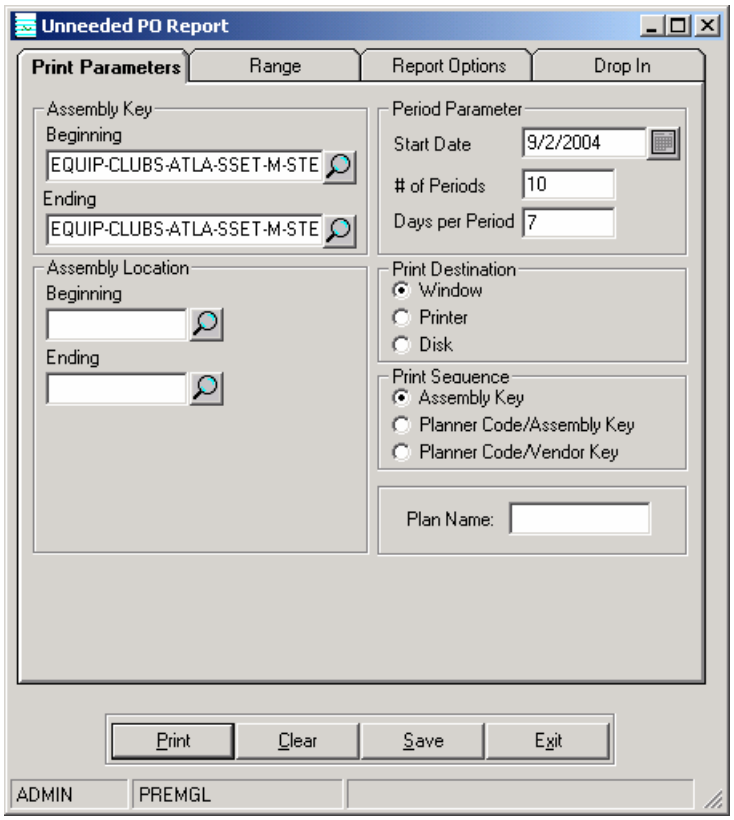
Similar to XP, except you start the task scheduler from the tool bar - near the date / time

On our system, we did not have to enter a user name and password, as we did on XP.

Unneeded PO Report

Overview

This report shows current POs which are not needed, based on the MRP report. When you open the program you just set the options the same way you have your MRP report set. Then run the report you will be able to see all unneeded POs.



One option that is different from the standard MRP report is the “Unneeded PO Summary Report” option. If this is checked then you will get a summary version of the report. This option will print two lines per item with the first showing the assembly key, description, and location. The second would be the Changes to POs line.

If the summary option is not checked then the report will be like the current MRP report in format.

BOMP Interface

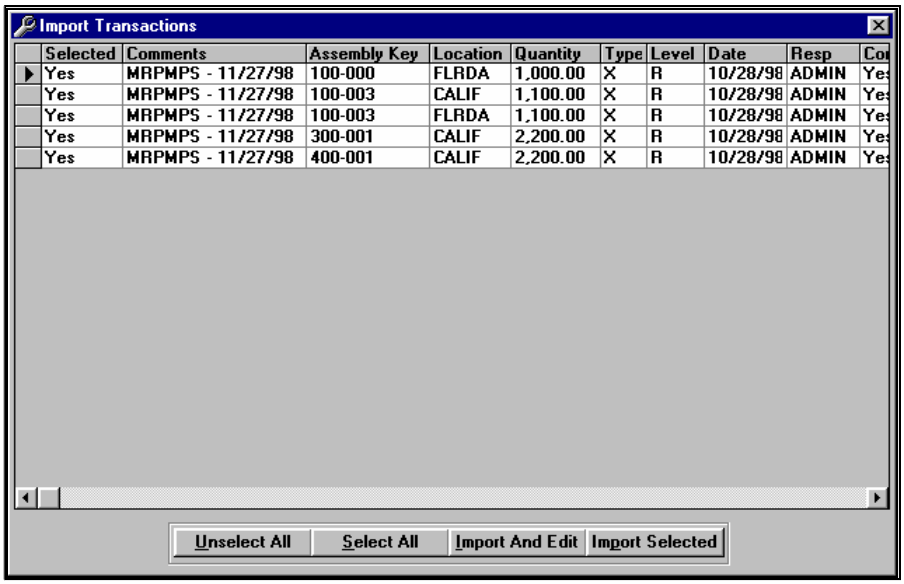
BOMP Interface Overview

MRP/MPS will interface to the Bill of Materials Processor if the “Create Commit Transactions in BOMP” option is selected in the Production Schedule Report Options section. A BOMP transaction is generated for all Assembly Items displayed on the Production Schedule Report with a planned quantity. If the “Include Requirements” option is selected, then the Production Schedule Report will display the planned quantity for any required Sub-Assembly Items; therefore, a BOMP transaction will be generated for these items, along with the Parent Assemblies. This chapter explains how to import the transactions into the Bill of Material Processor.

Important: BOMP Transactions will be generated each time the PS Report is run, regardless if the transactions have been generated previously. Do not select the interface option until your PS Report displays the correct planned quantities. Otherwise, you will have to Import and Delete the duplicate and incorrect BOMP transactions.

Import Transactions

After running the Production Schedule Report with the "create commit transactions in BOMP" option selected, the Transaction Entry Screen will have an Import Transactions Menu Selection. The Import Transactions screen displays the transactions that have been created by the MRP/MPS. The user may import the data from this screen to Transaction Entry.


Import Transactions
Selected
Comments
Assembly Key
Location
Quantity
Type
Level
Date
Resp
Yes MRPMPS - 11/27/98 100-000 FLRDA 1,000.00 X R 10/28/98 ADMIN
Yes MRPMPS - 11/27/98 100-003 CALIF 1,100.00 X R 10/28/98 ADMIN
Yes MRPMPS - 11/27/98 100-003 FLRDA 1,100.00 X R 10/28/98 ADMIN
Yes MRPMPS - 11/27/98 300-001 CALIF 2,200.00 X R 10/28/98 ADMIN
Yes MRPMPS - 11/27/98 400-001 CALIF 2,200.00 X R 10/28/98 ADMIN
Unselect All
Select All
Import And Edit
Import Selected

Unselect All

Changes the Selected Column to NO and the transactions will not be imported into the Transaction Entry Screen. However, the Import Transactions Menu will remain on the Transaction Screen and the transactions can be selected and imported later.

Select All

Changes the Selected Column to yes and selecting the Import Selected options will import all of the transactions into Transaction Entry.

Import and Edit

Moves the highlighted transaction to the Transaction Entry screen. The user can modify and save the transaction using all options available in the Transaction Entry screen. For more information on the Transaction Entry screen, please see the BOMP manual.

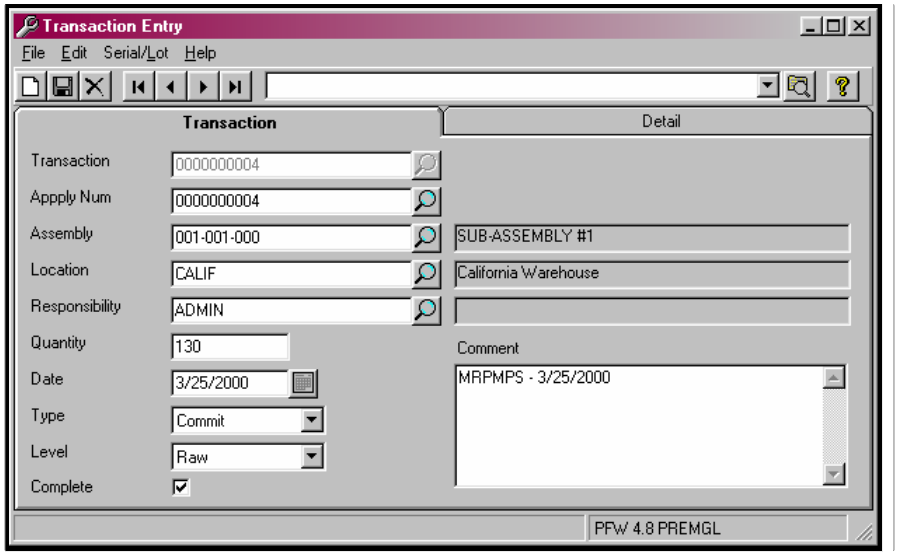
Import Selected

This option moves the selected transactions to the open transactions in Transaction Entry.

Cancel

Exits the Import Detail screen and returns to Transaction Entry.

How Transaction Entry Fields are Populated



Transaction Number-Apply Num

Import and Edit

Selecting this option leaves the Transaction Number and Apply Num fields blank. The user can enter a 1-10 alpha/numeric transaction number or when the transaction is saved, it will be automatically assigned by the system.

Import Selected

Selecting this option will populate the Transaction Number and Apply Num will the next transaction number. The system uses the "Next Transaction Number", which is set in the BOMP Defaults Maintenance screen.

Assembly

This field is populated with the Assembly Item displayed on the Production Schedule Report.

Location

This field is populated with the Location displayed on the Production Schedule Report. If the "Combine Locations" option is selected, then this field will display the location set in the Defaults screen.

Responsibility

This field is populated with the user name of the user that was logged into the Main Menu screen when the Production Schedule Report was run.

Quantity

This field is populated with the Production Schedule planned quantity.

Date

This field is populated with the date the Production Schedule Report was run.

Type

The Transaction Type is always defaulted to use the Commit transaction option. The user may change the Transaction Type after the transactions are imported into Transaction Entry. Please see the BOMP Manual for more information on transaction types.

Level

The Transaction Level is always defaulted to Raw. The user may change the Transaction Level after the transactions are imported into Transaction Entry. Please see the BOMP Manual for more information on transaction types.

Complete

The transactions are imported with the complete option selected.

Comment

The comment field is populated with the MRP/MPS and date.

Sage PFW PO Interface

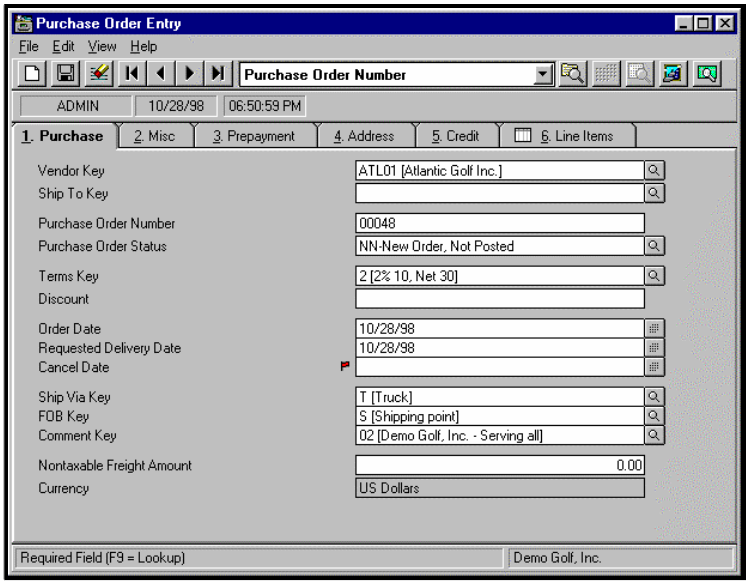
Sage PFW PO Interface Overview

If the "Create Purchase Orders for Requirements" option is selected in the Material Requirements Report Options section, then MRP/MPS will interface to Sage PFW's Purchase Order Module. A Purchase Order is generated for all Component Items displayed on the Material Requirements Report with a planned quantity. Also, the purchase conversion factor from the Item Master Table is taken into account during interface.

MRP/MPS reads the Primary Vendor Key assigned in Sage PFW's Inventory Item Location File. Component Items with the same Primary Vendor and with planned quantities in the same period will be combined on a Purchase Order.

Important: Purchase Orders will be generated each time the MRP Report is run, regardless if the PO's have been generated previously. Do not select the interface option until your MRP Report displays the correct planned quantities. Otherwise, you will have to delete the duplicate and incorrect Purchase Orders from Sage PFW.

How Sage PFW's Purchase Order Fields are populated



Print Screen from Sage PFW Purchase Order File.

Purchase Tab

Vendor Key

This field defaults to the Primary Vendor Key assigned to the inventory item in Sage PFW's Item Location File.

Ship to Key

This field is not populated.

Purchase Order Number

MRP/MPS assigns the Purchase Order Number from Sage PFW Next Event Id file.

Purchase Order Status

Defaults to NN-new order not posted.

Terms Key

This field is defaulted from Sage PFW's AP Vendor File.

Discount

This field is not populated.

Order Date

Defaults to the date the MPS report was run.

Requested Delivery Date

Defaults to the date the MPS report was run.

Cancel Date

This field is not populated. This is a required field in Sage PFW's Purchase Order File. The user must open the Purchase Orders and assign this value, before the PO can be posted through Sage PFW.

Ship via Key

This field is defaulted from Sage PFW's AP Vendor File.

FOB Key

This field is defaulted from Sage PFW's AP Vendor File.

Comment Key

This field is defaulted from Sage PFW's AP Vendor File.

Nontaxable Freight Amount

This field is not populated.

Currency

Sage PFW Currency is displayed.

Misc. Tab

Information in this screen defaults to the Vendor information entered into the AP Vendor File.

Prepayment Tab

The fields in this screen are not populated.

Address Tab

Information in this screen defaults to the Vendor information entered into the AP Vendor File.

Credit Tab

Information in this screen defaults to the Vendor information entered into the AP Vendor File.

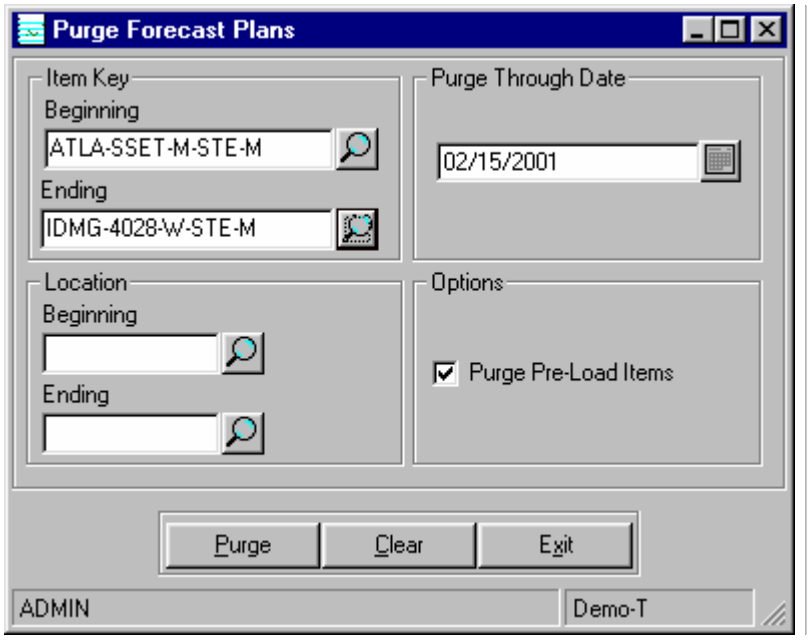
Line Items Tab

The line items are generated from the components displayed on the Materials Requirement Report. A line item is created for each component item and location. The order quantity is populated with the MRP item's planned quantity. Component Items with the same primary vendor are combined on one Purchase Order.

Purge Forecast Plans

Purge Forecast Plans Overview

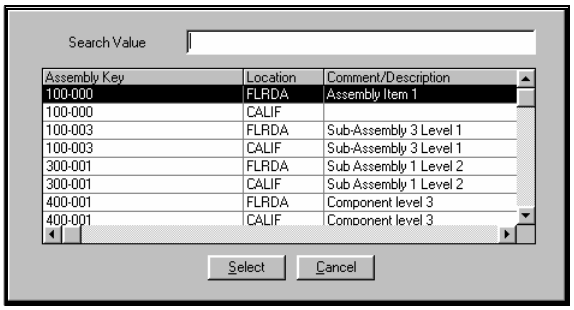
The Purge Forecast Plans utility allows the user to globally delete items from the Production Schedule.



Field Definitions

Item Key

The magnifying glass icon located to the left of the Beginning and Ending fields will allow a search of available data.



The user may search for a specific item or location, by pressing the magnifying glass icon, entering part or all of the value in the "Search Value" box and then pressing the <ENTER> key. Once the desired record is highlighted press <ENTER> or the select button. The value will be inserted into the entry field.

Beginning

If you want to purge the production schedule for a specific Assembly Item or range of Assembly Items, then enter the first item in this field. If this field left blank, the program will assume that you want to start with the first record.

Ending

Enter the last Assembly Item that the program will purge from the production schedule. If this field is left blank, the program will assume that you want to end with the last record.

Location

Beginning

If you want to purge plans for a specific Location or range of Locations, then enter the first location in this field. If this field left blank, the program will assume that you want to start with the first record.

Ending

Enter the last Location that the program will purge from the production schedule. If this field is left blank, the program will assume that you want to end with the last record.

You may use the Page Down, Page Up, Ctrl Home, and Ctrl End to navigate the search windows. The F3 function key will copy information from the Beginning field to the Ending Field.

Purge through Date

The utility will purge the planned items for the selected Item Key and Location range through the date entered in this field.

Purge Pre-Load Items

Selecting this check box will purge all pre-loaded items within the specified Item Key and Location ranges.

Standard Report Information

Standard Report Overview

Our reports are written using Crystal Report Writer, so additional fields, additional decimal places, and customizations may be easily added to the reports by modifying the report file. Please see the Advanced Features Chapter for more information on using custom reports. Custom report changes may be purchased through IndustriOS, for a minimal programming fee. For a quotations, please call 866-275-9028 or 905-829-2525.

Crystal Reports Window

The Crystal Reports screen contains the following tool bar:

1. Scrolls to first page of the report.
2. Scrolls to previous page of the report.
3. Scrolls to the next page of the report.
4. Scrolls to the last page of the report.
5. Cancels the report and returns to report parameters screen.
6. Prints the report to the printer specified in Printer Setup located in the File drop down menu.
7. Exports report to a specified file type. (Microsoft export DLL Files are required to use this options. Please see the Exporting a File section of this document for more information.
8. Changes the size of the report.

Exporting to a File

1. Select the Format and Destination for the report export. The format types available depend upon the export DLL files the specific workstation has installed in the Windows/System directory.
2. Set the directory box to the Drive and Folder where the report will be saved. The Drive can be selected from the dropdown menu box. Double clicking on the drive will display all available Folders. Double clicking on the

Folders will display all sub-folders and the files will be displayed in the Files box.

3. Select OK and the report will be saved in the directory specified.

Customizing your Software

Customizing Screen Captions

This feature was added to our software to allow foreign companies to adjust our software to their language; however, all users may find it useful to customize the software to fit your company's individual manufacturing needs. All of the captions (field descriptions, prompts, and screen descriptions) are modifiable. Follow this procedure to update the captions:

1. Download the prompt file from our version 4.0 download web page. You must contact us for the web address and have a current support contract to receive this upgrade.

You should download the prompt.exe file into the directory and folder that you installed the MSS from IndustriOS Software.

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2. Double click on the prompt.exe file. This file will be unzipped into the directory in which it resides. **All** of the ini files must be unzipped into the MSSSOFT directory (or the directory where the MSS from IndustriOS Software resides).
3. When changing the text in the INI files for version 4 there is one file for each program. The code that is shared by multiple programs is stored in the general.ini. For instance, every lookup uses the same form so in order to alter the prompt for a lookup you would customize the general.ini instead of the ini associated with the specific program.

Use extreme caution when customizing the general.ini file as it will update prompts throughout the entire program.

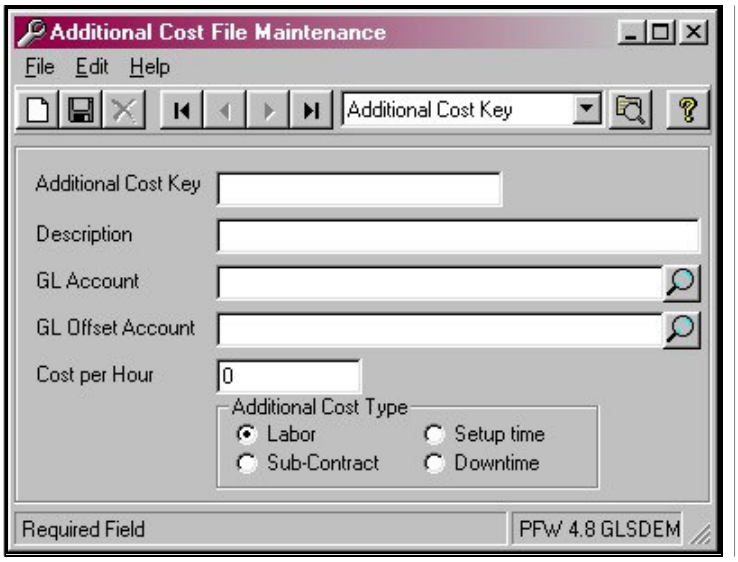
For example, to modify the Additional Cost Maintenance form you would open the ADDMNT.INI file and change the description to the right of the = sign.

Standard Screen and ADDMNT.INI Prompts before changes:

11=Account #, 12=Description, 320=Additional Cost File Maintenance, 321=Additional Cost Key, 322=Description, 323=GL Account, 324=GL Offset Account, 325=Cost, 326=Cost Type, 327=Labor, 328=Sub-Contract, 329=Setup Type, 330=Other

Note: Actual ADDMNT.ini file layout is different then shown; however, the prompts are the same.

Customized Screen and ADDMNT.INI Text Prompts



11=Account #, 12=Description, 320=Additional Cost File Maintenance, 321=Item Key, 322=Description, 323=GL Control Account, 324=GL Offset Account, 325=Cost per Hour, 326=Additional Cost Type, 327=Labor, 328=Sub-Contract, 329=Setup Time, 330=Downtime

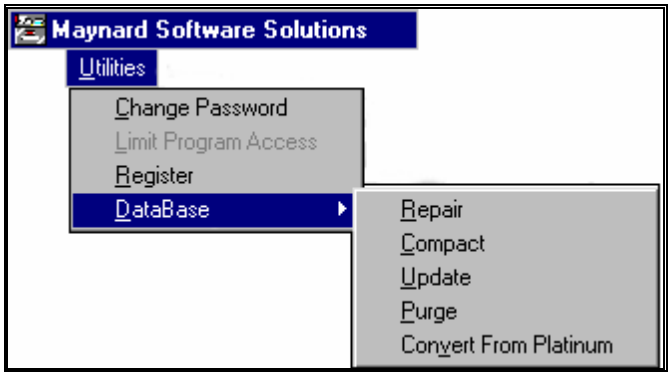
Adding Additional fields to the MRP Reports

See the MRP Advanced Features, MRP Report Section of this Manual.

Utilities-Database

Utilities-Database Overview

The utilities that are used to fix corrupted data in the Access database files are found in the Utilities-Database Menu. It is critical to back-up the BOMP.MDB and MRP.MDB file and make sure all users have exited the MSS from IndustriOS Software before attempting to process any of the utilities. It is also very important to follow the instructions related to each utility.



Repair

The Repair option is a Microsoft Access utility that attempts to repair only the tables, queries, and indexes in the database. The repair does not fix damaged forms, reports, macros, or modules; however these objects are copied to the repaired database.

Step-by-Step

1. Login as ADMIN, using the administrator password.
2. Make a backup copy of the database (s).
3. Verify that all users have exited completely out of the MSS from IndustriOS Software System and do not attempt to open the database during the repair process. If all users have not exited from the program or open the program during the Repair process you may lose important data.
4. Select Repair from the toolbar.

Note: The Repair Utility should only be run when a corrupted database error message occurs. The Repair command should not be run under any other circumstances.

Compact

This Microsoft Access utility will copy each object into a new database. If there is a damaged space on the disk, compacting will move the files from the damaged space. The original database is renamed, (databasename)SAV.MDB.

Step-by-Step

1. Login as ADMIN, using the administrator password.
2. Make a backup copy of the database.
3. Verify that all users have exited completely out of the MSS from IndustriOS Software system and do not attempt to open the database during the repair process.
4. Select Compact from the toolbar.